METZ 42-VC44

MODEL

SERVICE MANUAL

ORDER NO. VRD9706007C2

Service Manual

General Description
Adjustment Procedures
Block / Schematic Diagrams
Exploded Views / Parts List

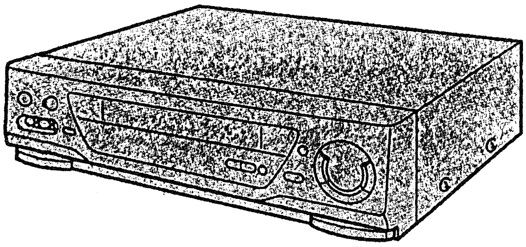
Video Cassette Recorder

Panasonic VHS
PAL

Hi-Fi **HQ**

NV-HD625 EG/EGH EGM/B/EC

K-MECHANISM



SPECIFICATIONS

ITEM	SPECIFICATION	
POWER	SOURCE: 220−240 V AC 50/60 Hz	
	CONSUMPTION: 21 watts (NV-HD625EG/EGH/EGM) 22 watts (NV-HD625B/EC)	
RECORDING SYSTEM	2 rotary heads, helical scanning system	
	PAL	
TV TUNER SYSTEM	NV-HD625 EG/EGH/EGM	VHF I : CHN1−CHS10 VHF III : CHE5−CHS41 (PAL/SECAM B) UHF: CH21−CH69 (PAL/SECAM G) 75Ω terminated
	NV-HD625B	UHF: CH21−CH69 (PAL I) 75Ω terminated
	NV-HD625EC	VHF I : CHE2−CHS3 VHF II : CHM1−CHM9 VHF III : CHM10−CHU2 VHF H: CHU3−CHS41 (PAL/SECAM B) UHF: CH21−CH69 (PAL/SECAM G) 75Ω terminated
RF OUT SYSTEM	NV-HD625EG/ EGH/EGM/EC	UHF: CH21-CH69 (PAL/SECAM G) 71±3dBμ, 75Ω terminated
	NV-HD625B	UHF: CH21-CH69 (PAL I) 71±3 dBμ, 75Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L'-R' heads)	
	INPUT: EURO AV (AV1, AV2) Connector (21 pin) 1.0 Vp-p, 75Ω unbalanced VIDEO IN (AV3) Connector (Phone type) 1.0 Vp-p, 75Ω unbalanced	
	OUTPUT: EURO AV (AV1, AV2) Connector (21 pin) 1.0 Vp-p, 75Ω unbalanced	

ITEM	SPECIFICATION
AUDIO	HEAD: 1 Stationary head (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
	INPUT: EURO AV (AV1, AV2) Connector (21 pin) More than −6 dBV (500 mV), 10 kΩ AUDIO IN (AV3) Connector (Phone type) More than −10 dBV (316mV), 47kΩ
	OUTPUT: AUDIO OUT Connector (Phono type) −6 dBV (500 mV), Less than 1 kΩ EURO AV (AV1, AV2) Connector (21 pin) −6 dBV (500 mV), Less than 1 kΩ
TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time: 2.5 min. with 180 min. type tape
OPERATING TEMPERATURE	5°C−40°C
OPERATING HUMIDITY	35%−80%
DIMENSIONS	430 (W)×99.9 (H)×319.5 (D) mm
WEIGHT	4.6 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-res Remote Controller 1 pc. Jack Cover

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

© 1997 Matsushita Electric Industrial Co.,Ltd.
All rights reserved. Unauthorized copying and
distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.

Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.

Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.

In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.

Section 3 contains block diagrams which provides you with information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c. ...

Section 4 contains exploded views and parts list.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note 1: Adjustment procedures, Disassembly Procedures and Assembly Procedures for Mechanism Chassis are separate volume from this service manual.
Please refer to the service manual for K-Mechanism Chassis. (Order No. VRD9307M131)

Note 2: The Model No. is indicated on the Schematic Diagram and Circuit Board Diagrams as follows.

Model No.	NV-HD625EG	NV-HD625EGH	NV-HD625EGM	NV-HD625B	NV-HD625EC
Indication Mark	(A)	(B)	(C)	(D)	(E)

CONTENTS

SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION 1-1
1-2. SELF-TEST INDICATION DISPLAY 1-6
1-3. SERVICE INFORMATION DISPLAY 1-7
1-4. OPERATING INSTRUCTIONS 1-12

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD 2-1
2-2. MECHANICAL ADJUSTMENT PROCEDURES 2-2
2-3. ELECTRICAL ADJUSTMENT PROCEDURES 2-5

SECTION 3
BLOCK DIAGRAMS & SCHEMATIC DIAGRAMS

3-1. ABBREVIATIONS 3-1
3-2. TIMER BLOCK DIAGRAM 3-14
3-3. SYSTEM CONTROL & SERVO BLOCK DIAGRAM 3-15
3-4. LUMINANCE & CHROMINANCE BLOCK DIAGRAM 3-17
3-5. Hi-Fi AUDIO BLOCK DIAGRAM 3-21
3-6. POWER SCHEMATIC DIAGRAM 3-23
3-7. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM 3-25
3-8. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM 3-28
3-9. MOTOR DRIVE SECTION IN MAIN SCHEMATIC DIAGRAM 3-29
3-10. POWER SUPPLY/RF SECTION IN MAIN SCHEMATIC DIAGRAM 3-31
3-11. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM 3-33
3-12. AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM 3-35
3-13. OSD SECTION IN MAIN SCHEMATIC DIAGRAM 3-37
3-14. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM 3-39
3-15. HEAD AMP SCHEMATIC DIAGRAM 3-42
3-16. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM 3-43
3-17. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM 3-45
3-18. OPERATION SCHEMATIC DIAGRAM 3-48
3-19. TIMER SCHEMATIC DIAGRAM 3-49
3-20. NICAM DECODER PACK SCHEMATIC DIAGRAM (NV-HD625B/EC) 3-51
3-21. DECODER PACK SCHEMATIC DIAGRAM (NV-HD625EG/EGH/EGM) 3-53
3-22. TV DEMODULATOR PACK SCHEMATIC DIAGRAM 3-54
3-23. POWER C.B.A. 3-55
3-24. CYLINDER STATOR UNIT 3-56
3-25. MAIN C.B.A. 3-57
3-26. LUMINANCE & CHROMINANCE PACK C.B.A. 3-59
3-27. TIMER C.B.A. 3-59
3-28. Hi-Fi AUDIO PACK C.B.A. 3-61
3-29. INPUT/OUTPUT PACK C.B.A. 3-62
3-30. HEAD AMP C.B.A. 3-63
3-31. OPERATION C.B.A. 3-64
3-32. NICAM DECODER PACK C.B.A. (NV-HD625B/EC) 3-65
3-33. DECODER PACK C.B.A. (NV-HD625EG/EGH/EGM) 3-66
3-34. TV DEMODULATOR PACK C.B.A. 3-66

SECTION 4
EXPLODED VIEWS & PARTS LIST

4-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST 4-1
4-2. ELECTRICAL REPLACEMENT PARTS LIST 4-8

SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

1-1-1. CHANNEL MEMORY IC INITIALIZATION

When replacing the memory IC7704, its IC should be initialized.

Note:1) It should be performed before tuning.
2) Meaning of "INITIALIZATION" is to make dependency in different models and to distinguish between different features.

How to set the Model Code.

Key operation	FIP Display	TV Monitor
Press the FF and EJECT keys.	0 00 0	None
Press the FF and EJECT keys in twice.	2 00 00	None
Press the EJECT keys for 3 seconds.	2 00	None
Press the CH UP key in twice.	2 2 00	None
Press the Power key.	2 2:00 flashing	Service Mode (See Fig. S2)
Set the Model Code by using 10-key on the Remote Controller Unit. (See Fig. S1)	2 2:00 flashing	Service Mode (See Fig. S2)
(For cancell) Press the Power key.	2 2 00	None
Press the FF and EJECT key several times until normal display.	10:00	None

Model	Code No.
NV-HD625EG/EGH/EGM	129
NV-HD625B	137
NV-HD625EC	133

Fig. S1 Model Code

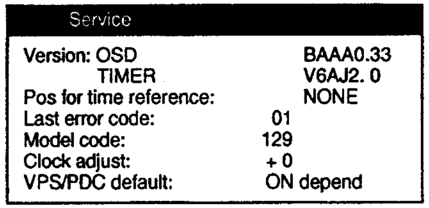

Service
Version: OSD BAAA0.33
TIMER V6AJ2. 0
Pos for time reference: NONE
Last error code: 01
Model code: 129
Clock adjust: + 0
VPS/PDC default: ON depend

Fig. S2 Sample of Service Mode OSD

Caution:
Since the "Clock adjust" and "VPS/PDC default" are future expansion, do not change the initial setting.

1-1-2. SERVICE POSITION

A. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.

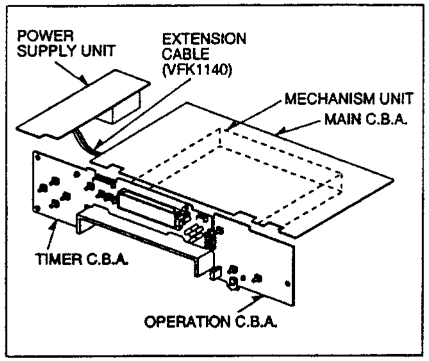


Fig. S3

B. MECHANISM SERVICE POSITION

When servicing the K-Mechanism, take out the mechanism from the MAIN C.B.A. and connect Extention Cable (VFK0889) between the loading-motor connector and P2001 as shown below.
In this position, the following services are possible.

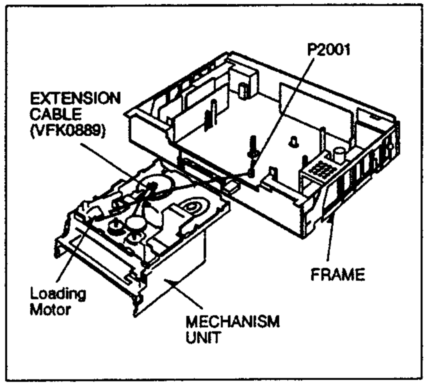


Fig. S4

B-1. CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for manual operation of loading/unloading operation as follows.

1. HAND OPERATION
   1) Turn the Worm Gear or the Worm Wheel Gear (Remove the Loading Motor Unit) manually.
2. BATTERY OPERATION
   1) Remove the Extention Cable (VFK0889).
   2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals.
3. SERVICE INFORMATION DISPLAY OPERATION
   1) Set the Service Information Display mode. Press the FF and EJECT buttons.
   2) Press the FF and EJECT buttons.
   3) In the Service Mode 7, the Loading Motor rotates for Loading operation when the "PLAY" button is pressed. The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of mechanism movement.

B-2. CHECKING OF REEL GEARS OPERATION

1) Move the mechanism to "PLAY" position by loading operation. (Refer to B-1)
2) Turn the Capstan Rotor Unit to check movement of reel gears.

1-1-3. CYLINDER UNIT REPLACEMENT

A. CYLINDER UNIT REPLACEMENT

1) Remove the 3 Screws (A) of the CYLINDER UNIT with a magnetized screw driver in the MECHANISM SERVICE POSITION.

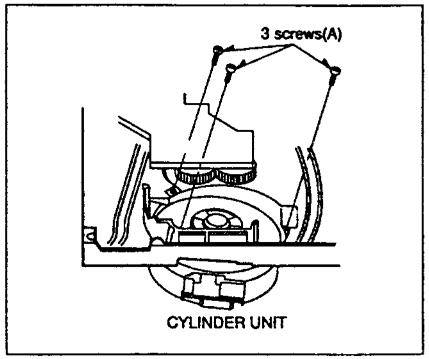


Fig. S5

B. UPPER CYLINDER DISASSEMBLY

1) Remove 2 screws (A).
2) Remove the Cylinder Stator Unit.
3) Remove 2 screws (B).
4) Remote the Cylinder Rotor Unit.
5) Loose hex screw (C) (1.5mm) and remove the Cylinder Retainer.
6) Remove the Upper Cylinder.

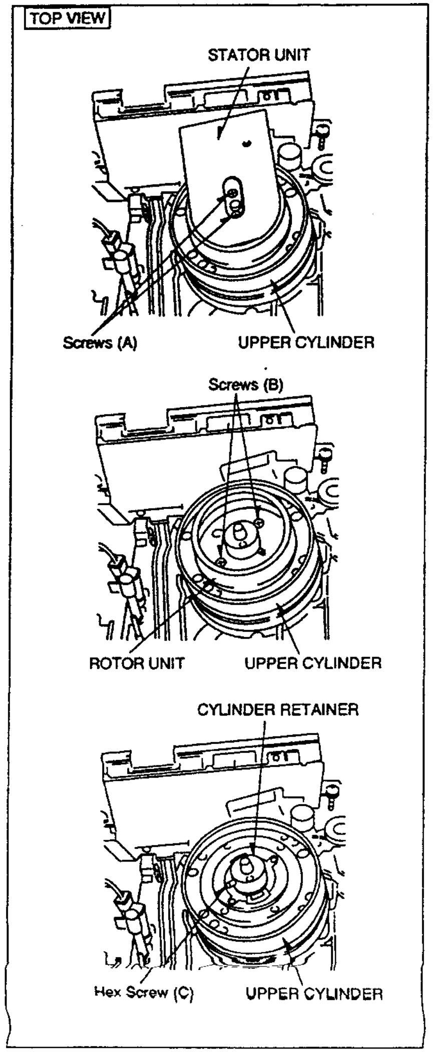

TOP VIEW
STATOR UNIT
Screws (A)
UPPER CYLINDER
Screws (B)
ROTOR UNIT
UPPER CYLINDER
CYLINDER RETAINER
Hex Screw (C)
UPPER CYLINDER

Fig. S6

C. UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order.

1) Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the Head Amp Shield.
2) Tighten the hex screw (C) (1.5mm) while pressing down on top of the Cylinder Retainer.

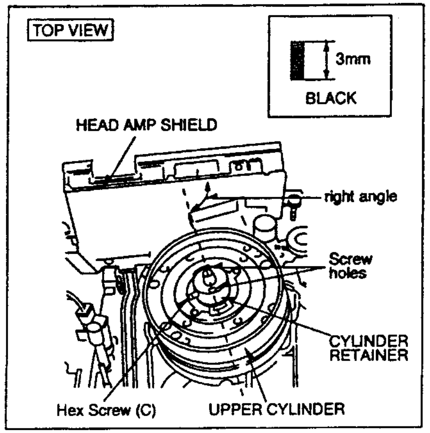

TOP VIEW
3mm
BLACK
HEAD AMP SHIELD
right angle
Screw holes
CYLINDER RETAINER
Hex Screw (C)
UPPER CYLINDER

Fig. S7

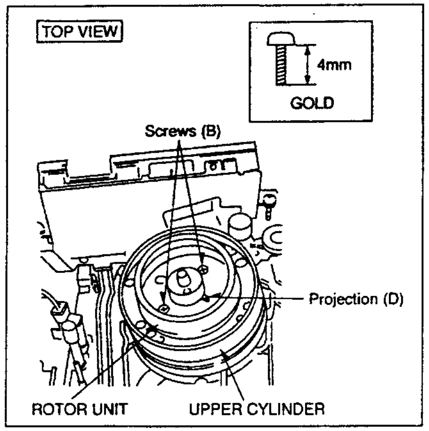

TOP VIEW
4mm
GOLD
Screws (B)
Projection (D)
ROTOR UNIT
UPPER CYLINDER

Fig. S8

3) Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.
4) *Tighten 2 screws (B).*
5) Install the Cylinder Stator Unit so that the rear side of the Cylinder Stator C.B.A. is parallel with the Head Amp Shield.
6) Tighten 2 screws (A).
7) Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL: VFJ8125H3F/NTSC: VFM8080HQFP) and adjust it if necessary.

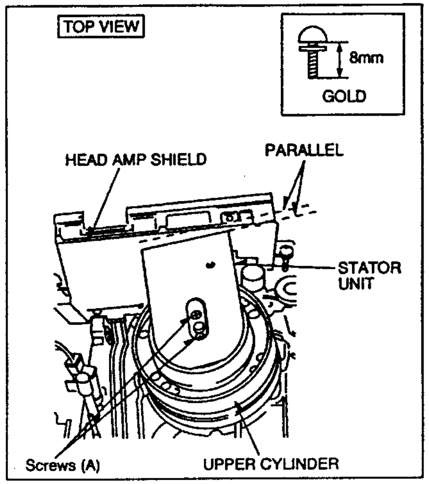

TOP VIEW
8mm
GOLD
HEAD AMP SHIELD
PARALLEL
STATOR UNIT
Screws (A)
UPPER CYLINDER

Fig. S9

1-1-4. FLAT CARD CABLE INSTLLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

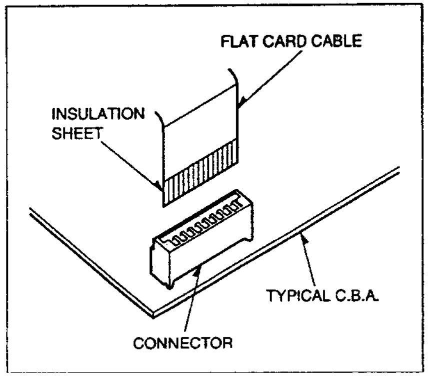

FLAT CARD CABLE
INSULATION SHEET
TYPICAL C.B.A.
CONNECTOR

Fig. S10

1-1-5. CAPSTAN STATOR UNIT ASSEMBLY

When replacing the Capstan Stator Unit, the Centre Fixing *Tool (VFK0851) must be used to fix the centre of Capstan* Stator Unit.

Method:

1) Place the Capstan Stator Unit into position.
2) Loosely tighten the 3 screws.
3) Insert the Centre Fixing Tool (VFK0851) as shown below.
4) Tighten the 3 screws.
5) Remove the Centre Fixing Tool.

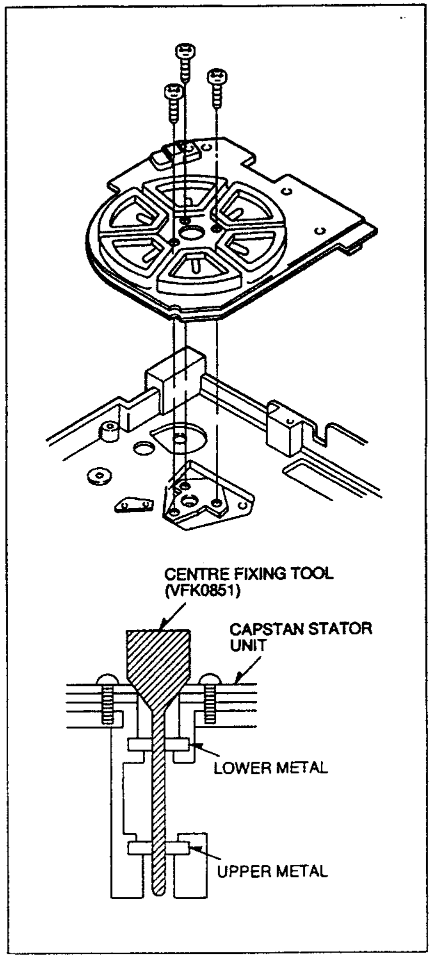

CENTRE FIXING TOOL (VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig. S11

1-1-6. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

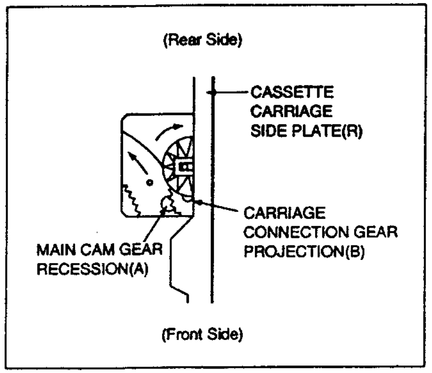

(Rear Side)
CASSETTE CARRIAGE SIDE PLATE(R)
CARRIAGE CONNECTION GEAR PROJECTION(B)
MAIN CAM GEAR RECESSION(A)
(Front Side)

Fig. S12 Top View of Eject Operation

1-1-7. TAKE-UP PHOTO SENSOR OPERATION

Note the following matters for Take-up Photo Sensor Operation.

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take-up Photo Sensor. In this case, cover the Take-up Photo Sensor to prevent the light from falling on it.
2) While servicing of the K-Mechanism with "Power On" and without cassette tape inserted, the Unit does not operate properly.

1-1-8. REMOVAL OF THE CASSETTE TAPE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Take out the mechanism from MAIN C.B.A.
2) Turn the Worm Gear manually, moving the Loading Post to the unloaded position.
3) Turn the Capstan Rotor Unit clockwise to take up the tape.
4) Turn the Worm Gear again to eject the cassette.

2. BATTERY OPERATION

1) Take out the mechanism from Main C.B.A.
2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals as shown below.
3) After moving the Loading Post to the unloaded position, disconnect the battery to stop the motor.
4) Turn the Capstan Rotor Unit to clockwise to take up the tape.
5) Reconnect the battery to eject the cassette.

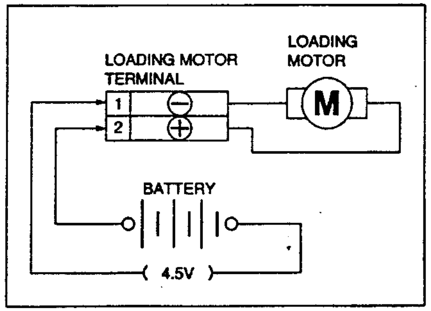


Fig. S13

If the cassette tape can not be removed by the above 2 methods, remove it by the following method.

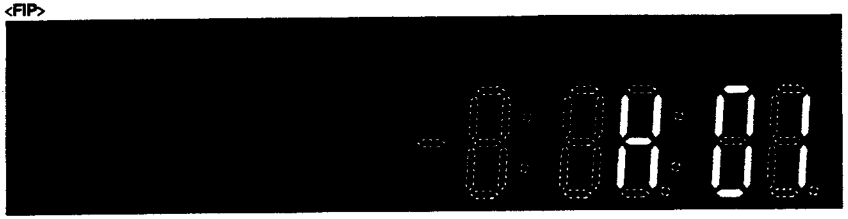
1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the cassette tape from tape transportation (P1, P2, P3 and P5 Posts).
5) Turn the Capstan Rotor Unit to take up the tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the cassette tape from the Cassette Compartment.

1-2. SELF-TEST INDICATION DISPLAY

This VTR has a self-diagnosis and display function. If the VTR detects trouble during installation or during use, one of the following Fault Indication Codes will automatically appear in the VTR display. Fault Indication codes are displayed in the form of a single English letter followed by two numbers, as for example "H01".

Note:1. The indication "U" is displayed on the FIP while power remains on.
2. Otherwise, the indication "H" or "F" is displayed on the FIP, and the power is automatically turned off. When the power is turned on again, the Fault Indication Code will disappear and the unit will return to normal display mode (either clock or counter).
3. This Fault Indication Code will be stored in the Timer microprocessor even with the AC plug disconnected.
The two-digit number portion of the stored Fault Indication Code can be redisplayed in the FIP's "second" display position (the last 2 digits on the light) by placing the unit is Service Mode Number 2 when turning on Service Information Display as for example "01" or "02" etc.
If a second error occurs, only the most recent error will be displayed and stored.
4. To erase the stored Fault Indication Code data, Press the FF and EJECT buttons for 5 seconds.

<FIP>



INDICATION	CAUSE	REMEDY/CHECK
U 10	Dew formation.	Wait until the indication disappears.
H 01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder-motor drive circuit.
H 02	Cassette tape is not wound up during tape unloading except Eject mode.	Check the capstan-motor drive circuit.
F 03	Mechanism locks during mode transition except Eject mode.	1.Check the loading-motor drive circuit. 2.Check the mechanism phase alignment. 3.Check the Mode Switch.
F 04	Mechanism locks during tape unloading.	1.Check the loading-motor drive circuit. 2.Check the mechanism phase alignment.
F 05	Cassette tape is not wound up during tape unloading in Eject mode.	1.Check the capstan-motor drive circuit. 2.Check the Supply/Take-up reel pulse.
F 06	Mechanism locks after tape unloading in Eject mode.	1.Check the loading-motor drive circuit. 2.Check the mechanism phase alignment for Cassette Holder Unit.
F 07	Rec power voltage does not appear in Rec mode.	Check the Rec power supply circuit.
F 08	Rec power voltage appears except Rec mode.	Check the Rec power supply circuit.
F 09	No serial clock transmission between IC6001 and IC7501.	Check the serial clock circuit.

Fig. T1 Self-Test Indication Display

1-3. SERVICE INFORMATION DISPLAY

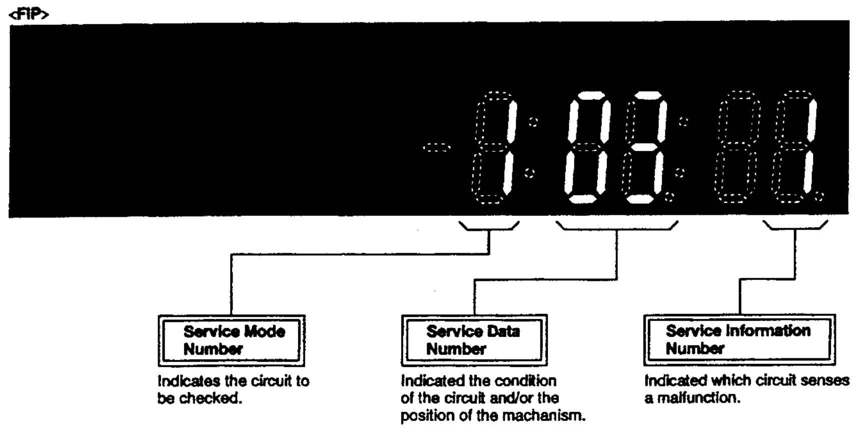

<FIP>
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicated the condition of the circuit and/or the position of the machanism.
Service Information Number
Indicated which circuit senses a malfunction.

Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

(1) Press the FF and EJECT buttons.

In the Service Information Display, there are four digits divided into 3 functions.
The first digit indicates which of the 7 service modes that the unit is currently in.

MODE 1 : Checks tape protection circuit
MODE 2 : Checks tape transport mechanism
MODE 3 : Checks mode switching operation
MODE 4 : Checks control buttons
MODE 5 : Checks capstan motor
MODE 6 : Checks cylinder motor
MODE 7 : Checks loading/unloading operation

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is not supplied.

1-3-3. Use of Service Modes

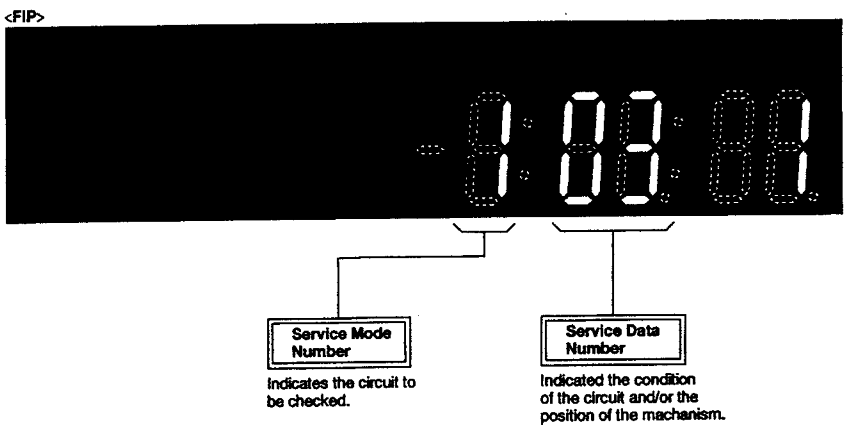

<FIP>
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicated the condition of the circuit and/or the position of the machanism.

Fig. D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.
(2) To change Service Modes press the FF and EJECT buttons simultaneously.
(3) Mode 1 : Checks that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors.

When the light is blocked to both sensors, "00" should be indicated on the service data number.
When the light is blocked to the supply sensor, "01" should be indicated.

(4) Mode 2 : Checks the mode switch circuit while indicating mechanism position.

Service Data Numbers indicate the position of the mode switch and there by the mechanism position.

(5) Mode 3 : Checks that mode switch circuit operations have been completed.

Service Data Number should indicate "00" after each mechanism operation is completed.

(6) Mode 4 : Checks the operation circuit.

Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.

(7) Mode 5 : Checks the capstan motor circuit.

Indicates if the IC6001 has received the command to rotate the capstan motor.

(8) Mode 6 : Checks the cylinder motor circuit.

IC6001 has received the command to rotate the cylinder motor.

(9) Mode 7 : Checks the Loading/Unloading Operation.

The Loading Motor rotates for loading operation when the "PLAY" button is pressed.
The Loading Motor rotates for unloading operation when the "STOP" button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.

<NOTE>
Refer to Fig. D5 for details of Service Data Numbers.

1-3-4. Service Information Number

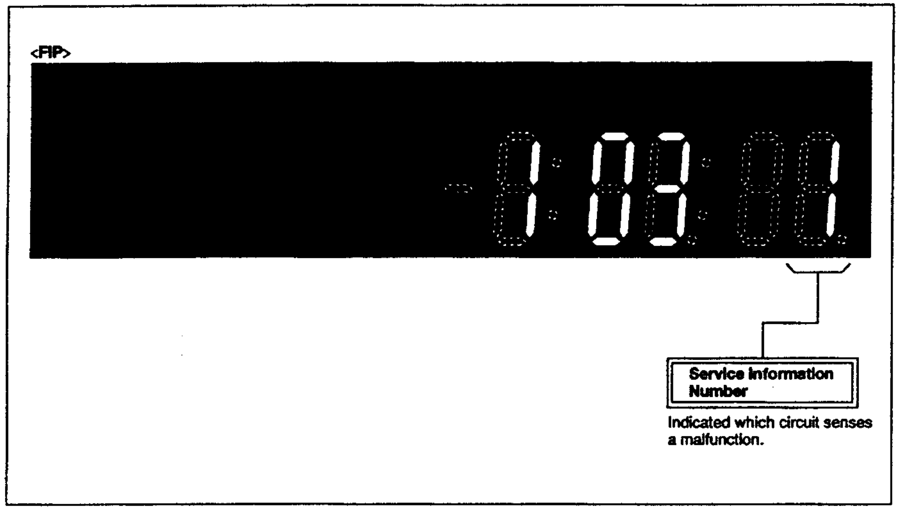

<FIP>
1 03 01
Service Information Number
Indicated which circuit senses a malfunction.

Fig. D3 Service Information Number on S.I.D.

Refer to Fig. D4 for details of Service Information Number.

Note:
The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is not supplied. (It can be displayed in the Service Mode 2.)
If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-In/Eject operation

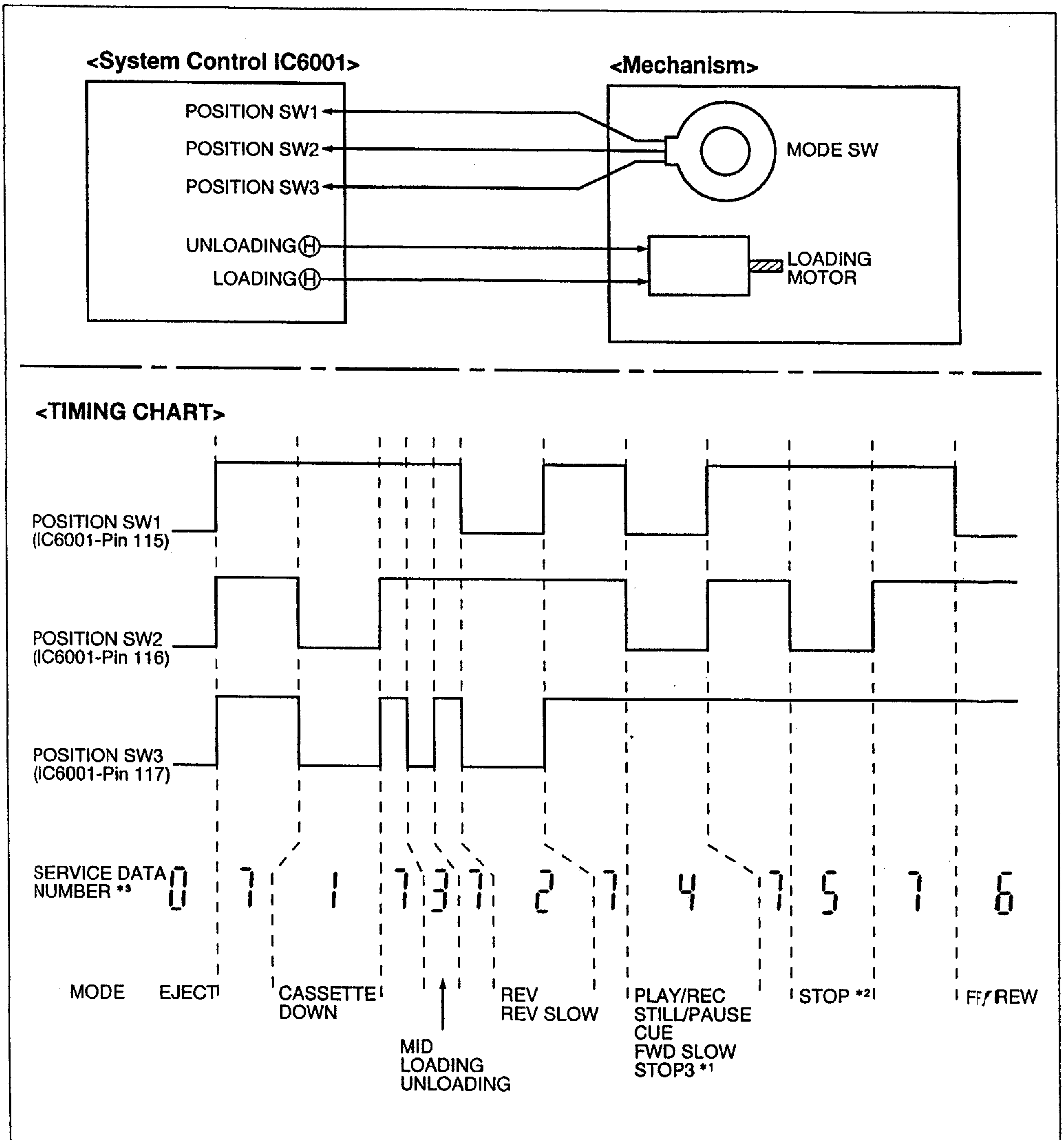
Fig. D4 Detail Service Information Numbers

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	———	00	No light detected at either sensor.	Tape not required.
		01	Tape Beginning. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	———	00	EJECT	Tape Required. ∗1: STOP3; The Pinch Roller is on the capstan motor shaft. ∗2: STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig. D7 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 [∗1]	
		05	STOP [∗2]	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6		Tape not required.
5	Left digit only, disregard Right digit display.	8 1 Left Digit Right Digit	8, 9, u, A, –, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	8 7 Left Digit Right Digit	1, 2, 3, 4, 5, 6, 7, Indicate that the Capstan motor "CUE, FF, Forward Slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	8 Left Digit Right Digit	8, 9, u, A, –, n, L, and no display indicate that the Capstan motor "Reverse, Rew, Reverse Slow" commands received by IC6001.	
6	Left digit only, disregard Right digit display.	1 0 Left Digit Right Digit	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

Fig. D5 Service Data Display and Indication

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position through the Mode SW.
Fig. D6 shows the timing for Service Mode Number 2.



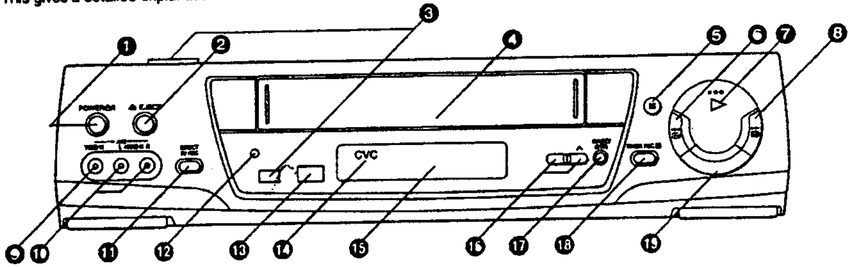
<System Control IC6001>
<Mechanism>
POSITION SW1
POSITION SW2
POSITION SW3
UNLOADING Ⓗ
LOADING Ⓗ
MODE SW
LOADING MOTOR
<TIMING CHART>
POSITION SW1 (IC6001-Pin 115)
POSITION SW2 (IC6001-Pin 116)
POSITION SW3 (IC6001-Pin 117)
SERVICE DATA NUMBER *3
0 7 1 7 3 7 2 7 4 7 5 7 6
MODE
EJECT
CASSETTE DOWN
MID LOADING UNLOADING
REV REV SLOW
PLAY/REC STILL/PAUSE CUE FWD SLOW STOP3 *1
STOP *2
FF/REW

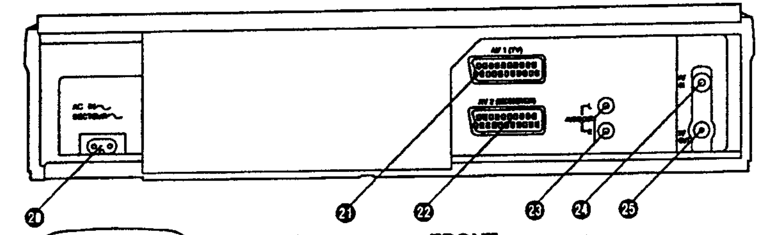
*1 : Stop 3 ; The pinch Roller is on the capstan motor shaft.
*2 : Stop ; The pinch Roller is off the capstan motor shaft.
*3 : Service Data Number ; This is for Service Mode Number 2.

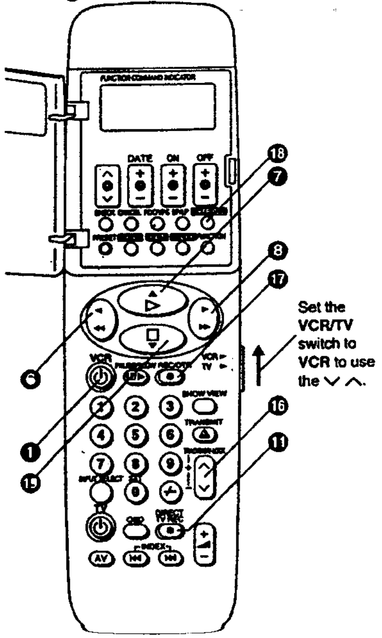
Fig. D6 Timing Chart of Mode SW

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.







Set the VCR/TV switch to VCR to use the ∨ ∧.

FRONT

① **POWER ⏻/I (VCR ⏻)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

② **EJECT**
To eject a video cassette.

③ **Infra-red Signal Transmitter**
Signals are sent from here to the receiver when using this unit to control one of the satellite receivers found on the attached list of compatible satellite receivers. For assured satellite receiver control, Satellite Settings must be performed at the installation stage.

④ **Cassette Compartment**
Insert a video cassette here.

⑤ **❚❚ (PAUSE/STILL)**
During playback: Still picture.
During recording: To interrupt recording.

⑥ **◀◀ (REWIND)**

In the stop mode:	To rewind the tape.
In the playback mode:	To search backward.
In the rewind mode:	To obtain high speed picture.

"◁◁" is lit.

⑦ **▷ (PLAY)**
To start playback. "▷" is lit.
For the repeat playback function.

⑧ **▶▶ (FAST FORWARD)**

In the stop mode:	To fast forward the tape.
In the playback mode:	To search forward.
In the fast forward mode:	To obtain high speed picture.

"▷▷" is lit.

⑨ **VIDEO IN (AV3)**
To connect the video cable to a movie camera or to another VCR.

⑩ **AUDIO IN (AV3)**
To connect the audio cable to a movie camera or to another VCR.
- Use the L connector for operations in the normal (monaural) mode.

⑪ **DIRECT TV REC**
For the Direct TV REC function.

⑫ **Standby Indicator**
This indicator is lit when the VCR is turned off or the VCR is timer recording standby mode.

⑬ **Infra-red Remote Control Receiver Window**

⑭ **CVC (Crystal View Control) Indicator**
Indicates that the CVC function is active. This indicator is normally lit when the power is on.

⑮ **Display**

⑯ **∨ ∧**
To select the required programme position (TV station) of the VCR.

These buttons can also be used for tracking adjustment and vertical locking adjustment.
See page 6.

Set the VCR/TV switch to VCR to use the ∨ ∧ button on the remote controller.

⑰ **REC/OTR**
To start a recording.
For One-Touch Recording (OTR).

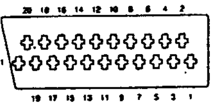
⑱ **TIMER REC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VCR operation is not possible unless this button is set to off.

⑲ **■, □ (STOP)**
To stop any playback or recording.

REAR

⑳ **AC IN~**
To connect to the main power supply.

㉑ **AV1 (TV)**
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV



1 AUDIO OUTPUT
2 AUDIO INPUT
3 AUDIO OUTPUT
4 AUDIO GROUND
5 BLUE GROUND
6 AUDIO INPUT
7 BLUE
8 SWITCHING VOLTAGE
9 GREEN GROUND
10 CONTROL SIGNAL
11 GREEN
12 No connection
13 RED GROUND
14 BLANKING GROUND
15 RED
16 BLANKING
17 VIDEO OUTPUT GROUND
18 VIDEO INPUT GROUND
19 VIDEO OUTPUT
20 VIDEO INPUT
21 GROUND

Caution: RGB reservation for only E/E operation when connecting the Pay TV decoder

㉒ **AV2 (DECODER/EXT)**
To connect to a decoder, another VCR or a satellite receiver.

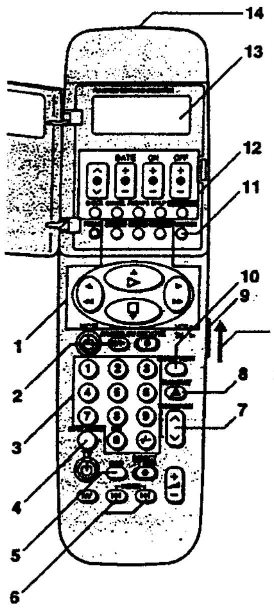
㉓ **AUDIO OUT**
To connect the audio cable to a stereo audio system.

㉔ **RF IN**
To connect to the external aerial.

㉕ **RF OUT**
To connect to the aerial terminal on a TV set.

Infra-red Remote Controller

VCR OPERATION



Set the VCR/TV switch to VCR to use the ∨ ∧ and the numeric buttons.

1 **On Screen Display Menu Operation Buttons**
The buttons with the green characters are used for the on screen display menu operation.

MENU:	To make On Screen Display Main Menu appear on the TV screen.
EXIT:	To exit the menu.
STORE:	To confirm the selection, or to store.
▲ ▼ ◀ ▶:	To make selections from On Screen Display. ●These buttons can also be used for the playback, stop, rewind and fast forward mode.

2 **PAUSE/SLOW**
During playback:
- ●When pressed once: Still picture. "▯▯" is lit.
- ●When pressed for 2 seconds or more:
  Slow playback. "▯▷" is lit.

During recording: To interrupt recording.

3 **Numeric Buttons**
Ensure that the VCR/TV switch is set to VCR.
- ●To select the programme positions (1–99) of the VCR.

9: ⑨

19: (-/--) → ① → ⑨

- ●To select the satellite programme positions (SAT1–SAT99).

SAT 9: $\overset{\text{SAT}}{⓪}$ → $\overset{\text{SAT}}{⓪}$ → ⑨

SAT 19: $\overset{\text{SAT}}{⓪}$ → ① → ⑨

- ●To programme a ShowView number.

4 **INPUT SELECT**
To select the A1, A2 or A3 external recording source.

5 **OSD**
For the On Screen Display Function.

6 **INDEX**
For the index search function.

7 **∨ ∧, TRACKING/V-LOCK**
Ensure that the VCR/TV switch is set to VCR.

To select the required programme position (TV station) of the VCR.

For the tracking adjustment and vertical locking adjustment
- ●For manual tracking adjustment
  The ∨ (−) and ∧ (+) buttons are used to adjust the tracking when, for example, noise bars on the picture during normal playback are better removed manually than by automatic digital tracking control. Press both buttons down at the same time to return to automatic digital tracking control.
- ●For slow tracking adjustment
  When noise bars appear during still or slow playback, switch over to slow playback and adjust with the ∨ (−) or ∧ (+) button to reduce the noise bars.
- ●For vertical locking adjustment
  Use the ∨ (−) and ∧ (+) buttons to minimize any vertical jitter during still picture playback.

8 **TRANSMIT**
To transmit the data that has been set on the remote controller to the VCR.

9 **VCR/TV switch**
VCR: To select the VCR operation mode.
TV: To select the TV operation mode.

10 **SHOW VIEW**
For the ShowView programming.

11 **FUNCTION**
To display or select the command menu on the display of the remote controller.
Press this button repeatedly until the desired command menu flashes on and off, and then press **TRANSMIT**.

FUNCTION
TRANSMIT
5

AUDIO OUT:
To select the desired sound mode.
At the every push of **TRANSMIT** button, the audio output mode changes as follows.

→Stereo→Left→Right→Normal audio track

The Left (L) and Right (R) Indicators shown which sound mode is selected in the following way.

Stereo:	Both the L and R Indicators appear.
Left:	The L indicator appears.
Right:	The R indicator appears.
Normal:	Both the L and R Indicators don't appear.

DISPLAY:
To change the indication on the VCR Display or On Screen Display.

→Clock→Counter→Remaining Tape Time

RESET:
To reset the tape counter (elapsed time) to "0:00.00".
- ●The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

AV LINK:
To select the VCR mode or TV mode for AV LINK.

12 **Timer Recording Operation Buttons**

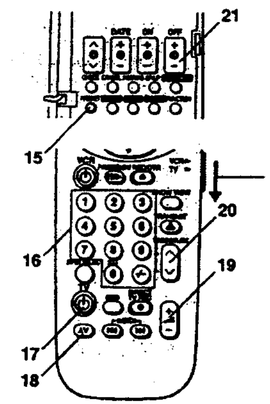
∨ ∧, DATE, ON, OFF:	To programme a timer recording.
CHECK:	To check timer programmes.
CANCEL:	To cancel timer programmes.
PDC/VPS:	To set the PDC/VPS recording option or cancel the option.
SP/LP:	To select the tape speed desired for recording. SP gives the best picture quality. LP gives the longest recording time.
TIMER REC:	To turn the timer recording function on and off. 🕒 is lit or not lit. Once operating timer recording function, the normal VCR operation is not possible unless this button is set to off.

13 **Display**

14 **Infra-red Transmitter**
The programming data are transmitted from here to the VCR.

TV OPERATION

Refer to page 42.



Set the VCR/TV switch to TV to use the ∨ ∧ and the numeric buttons.

15 **PRESET**
To set the remote controller for operation of the TV.

16 **Numeric Buttons**
To select programme positions (1–99) of the TV.
- ●Ensure that the VCR/TV switch is set to TV.

17 **TV ⏻**
Press to switch the TV from on to standby mode or vice vesa. In standby mode, the TV is still connected to the mains.
- ●With some TV models, it may only be possible to switch the TV to the standby mode using this button. In this case, use the numeric buttons, AV or ∨ ∧ to switch the TV on.

18 **AV**
To select TV Input.

19 ◢
To adjust the volume of the TV.

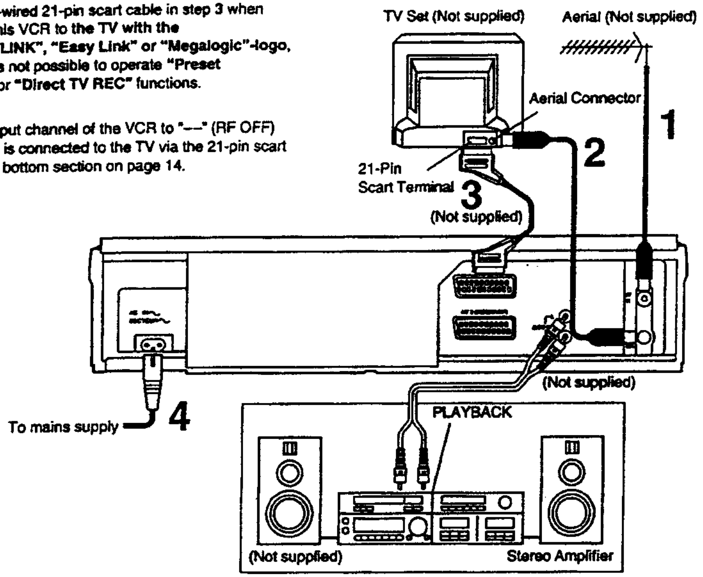
20 **∨ ∧**
To select the required programme position (TV station) of the TV.
- ●Ensure that the VCR/TV switch is set to TV.

21 **OFF**
To set the remote controller for operation of the TV.

Connection to a TV Set with 21-Pin Scart Terminal

- After making this connection, refer to page 15 or 16.
- Use the fully-wired 21-pin scart cable in step 3 when connecting this VCR to the TV with the **"NEXTVIEWLINK", "Easy Link" or "Megalogic"-logo,** otherwise it is not possible to operate **"Preset Download"** or **"Direct TV REC"** functions.

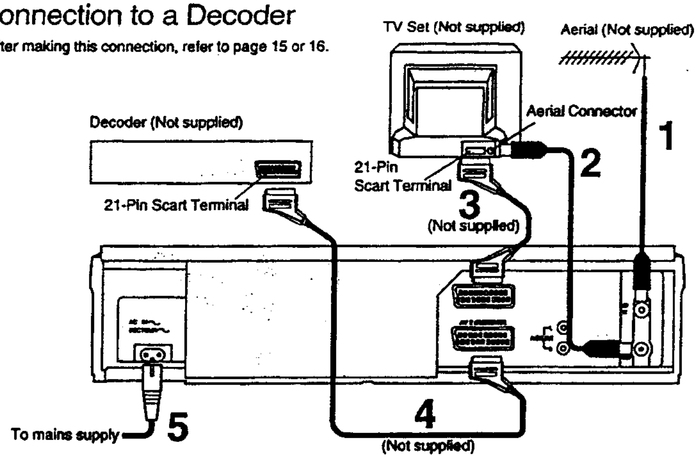
Note:
Set the RF output channel of the VCR to "--" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable. See the bottom section on page 14.


TV Set (Not supplied)
Aerial (Not supplied)
Aerial Connector
1
2
21-Pin Scart Terminal
3
(Not supplied)
(Not supplied)
To mains supply
4
PLAYBACK
(Not supplied)
Stereo Amplifier

- **Connection to a Stereo Amplifier**

Connection to a Decoder

- After making this connection, refer to page 15 or 16.


TV Set (Not supplied)
Aerial (Not supplied)
Aerial Connector
1
2
Decoder (Not supplied)
21-Pin Scart Terminal
21-Pin Scart Terminal
3
(Not supplied)
To mains supply
5
4
(Not supplied)

Notes:

- If the TV set is provided with an RGB-compatible connector, connect the 21-pin AV cable from the VCR to this connector. Use the fully-wired 21-pin scart cable for connecting the TV set and VCR and for connecting the VCR and decoder.
- Set the RF output channel of the VCR to "--" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable. See the bottom section on page 14.
- When the decoder is connected to the AV2 socket, **AV2 Connection** must first be set to **DECODER.** (See page 40.)

AV LINK

With this button the connected colour TV set can be switched from TV mode to VCR mode (vice versa) when it is connected by means of 21-pin scart cable.

This makes a variety of functions possible, such as simultaneous recording and viewing when a Pay TV decoder or a satellite receiver has been connected.

VCR mode (VCR indicator lights):
To enjoy sound and pictures from the VCR.

- When **MENU** is pressed and the OSD (On Screen Display) screen is displayed, the unit also automatically switches to VCR mode.
  However, if the unit is originally in TV mode, the VCR indicator is not displayed.
- The unit also automatically switches to VCR mode when playback is started. However, the unit cannot be returned to TV mode during playback.

TV mode (VCR indicator goes off):
To watch another programme on the TV while recording on the VCR.

- Select the programme to be watched using the TV set's tuner.
- The sound and pictures of a different channel are received by the VCR.

VCR		TV set
Power On	VCR mode	AV input selected
	TV mode	Input from TV set's tuner*
Power Off	—	Input from TV set's tuner

*When the VCR is set to the TV mode and the Pay TV channel is selected, the signals will still be scrambled even when Pay TV is selected by the TV set's tuner. At a time like this, either set the VCR to the VCR mode or switch the TV set's input signals to AV input.

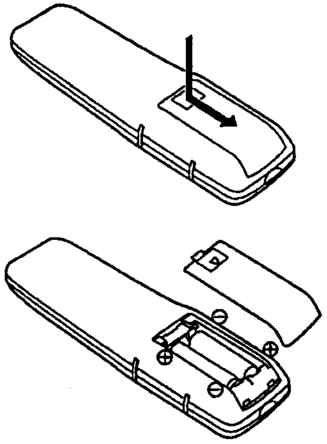
Power Source for the Remote Controller

The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Installing the Batteries



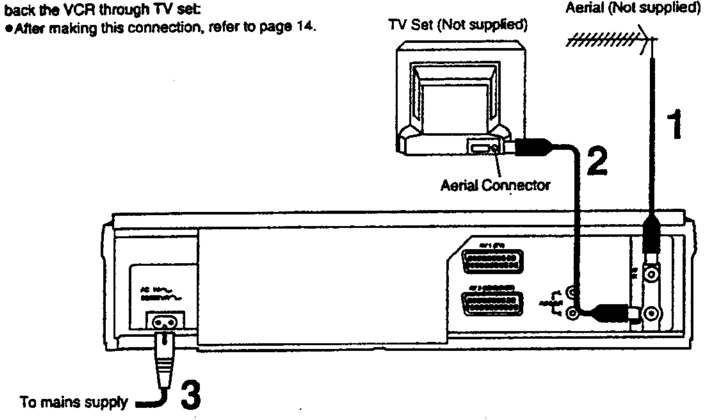
Connections

This tells you how to connect with an aerial, TV, etc.

Basic Connections

The following connections are required to record and play back the VCR through TV set:

- After making this connection, refer to page 14.

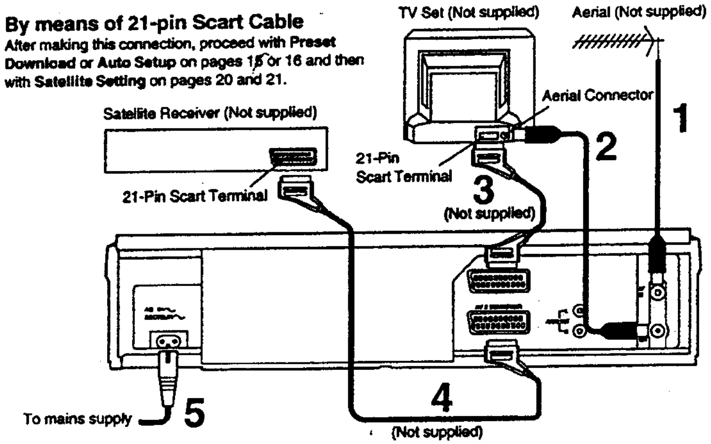


Connection to a Satellite Receiver

- The satellite receiver control functions are activated when connection is made to one of the satellite receivers found on the attached list of compatible satellite receivers, provided that the settings from pages 19 to 21 have been performed. Also make absolutely sure that the satellite receiver is installed in a location as per the figure below.
- Also refer to the operating instructions for the satellite receiver.
- The unit may not operate properly if it has not been installed in a satisfactory position.

Ⓐ By means of 21-pin Scart Cable

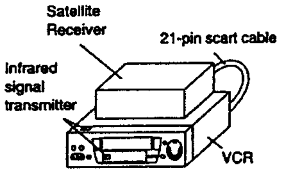
After making this connection, proceed with Preset Download or Auto Setup on pages 15 or 16 and then with Satellite Setting on pages 20 and 21.


TV Set (Not supplied)
Aerial (Not supplied)
Aerial Connector
1
2
21-Pin Scart Terminal
3
(Not supplied)
Satellite Receiver (Not supplied)
21-Pin Scart Terminal
4
(Not supplied)
To mains supply
5

Notes:
- Set the RF output channel of the VCR to "—" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable. See the bottom section on page 14.
- When a decoder is to be connected in addition to the satellite receiver, read the Operating Instructions accompanying the decoder.
- The AV LINK function may not work, depending on the type of satellite receiver.
- When the satellite receiver is connected to the AV2 socket, **AV2 Connection** must first be set to EXT. (See page 40.)

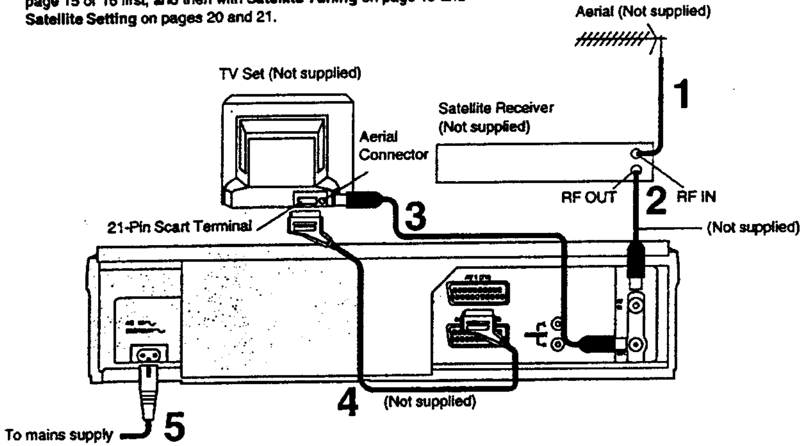
How to Install

We recommend that the satellite receiver be placed on top of the VCR, positioned so that the infrared signal transmitter is clearly accessible.


Satellite Receiver
21-pin scart cable
Infrared signal transmitter
VCR

Ⓑ By means of RF Coaxial Cable

After making this connection, proceed with Preset Download or Auto Setup on page 15 or 16 first, and then with Satellite Tuning on page 19 and Satellite Setting on pages 20 and 21.

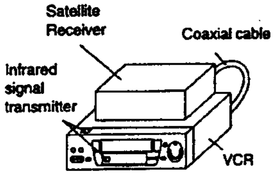

Aerial (Not supplied)
TV Set (Not supplied)
1
Satellite Receiver (Not supplied)
Aerial Connector
RF OUT
2
RF IN
(Not supplied)
21-Pin Scart Terminal
3
4
(Not supplied)
To mains supply
5

RF ouput channel of the satellite receiver should be adjusted away from channel 36, which is used by the VCR, e.g. re-adjust to channel 33.

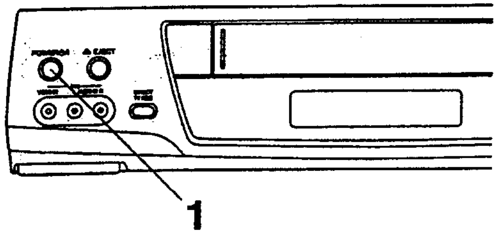
Note:
Set the RF output channel of the VCR to "—" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable.
See the bottom section on page 14.

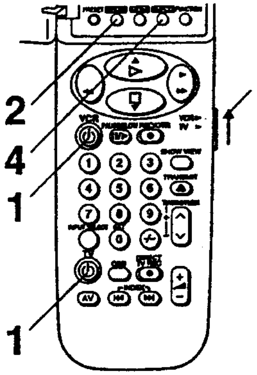
How to Install

We recommend that the satellite receiver be placed on top of the VCR, positioned so that the infrared signal transmitter is clearly accessible.


Satellite Receiver
Coaxial cable
Infrared signal transmitter
VCR

Tuning the TV to your VCR





Set the VCR/ TV switch to VCR to use the ∨ ∧ and the numeric buttons.

The VCR supplies a signal to the TV set via the RF coaxial cable on channel 36.
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

If you have connected the VCR to the TV through the 21-pin scart terminal, then you do not need to follow the procedure mentioned below.

Operations

1

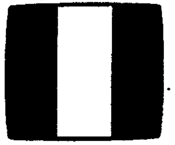
Turn on the TV and VCR.

2

Keep **MENU** pressed for 5 seconds or more.
- Press the button until "Ch" appears in the VCR display.

3

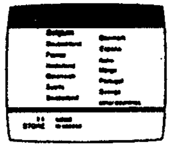
On Screen Display



(Test Pattern)

Set the TV to an unused position which you wish to use for your video playback.
- Tune the TV until the test pattern appears on the screen.

4



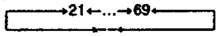
(Country-Selection)

Press **STORE** to exit the Test Pattern screen. The **Country-Selection** display appears.
Now refer to page 16.

Use the remote controller for changing the RF output channel setting:
If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (21–69).
Follow the steps 1 and 2 above.

3 Enter the desired channel number (21–69) by using the numeric buttons or the ∨ ∧ of the remote controller.
- Set the RF output channel of the VCR to "––" (RF OFF) when the VCR is connected to the TV via the 21-pin scart cable.

Press the "0" numeric button or the ∨ ∧ buttons to display "––".

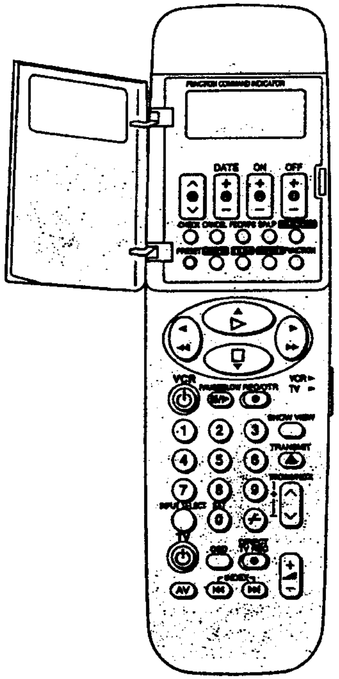


(RF OFF)

4 Press **STORE** to finish the setting mode.
- Retune your TV to the new channel for the VCR.
- After the **Country-Selection** is set, the **Country-Selection** screen will not be displayed even if the RF output channel is changed and the STORE button is pressed.

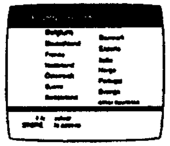
Preset Download

When the VCR is connected to a TV with the "NEXTVIEWLINK", "Easy Link" or "Megalogic"-logo using the fully-wired 21-pin scart cable, the station list data will be copied from the TV to the VCR and the TV channel will be preset on the VCR.
This function is known as **"Preset Download (Download from TV)".**

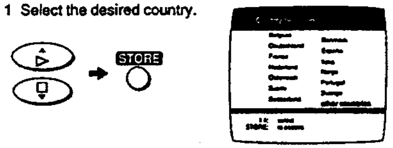


When the VCR is turned on after being connected to a TV with the "NEXTVIEWLINK", "Easy Link" or "Megalogic"-logo using the fully-wired 21-pin scart cable, follow the procedure below.

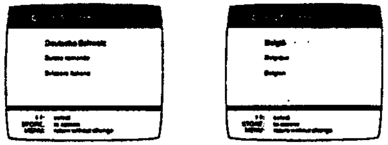
On Screen Display



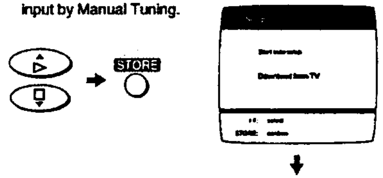
1 Select the desired country.



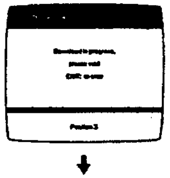
- When Switzerland or Belgium has been selected, operation moves to the screen which follows. Select the item in accordance with the language required.



2 **Select Download from TV.**
- When performing Manual Tuning described hereafter on page 35, be sure to select **Start auto setup.** This is because when the tuning contents for the TV are changed, this information is downloaded to the VCR again, possibly erasing the independent contents input by Manual Tuning.



- Downloading is started automatically.



- When the downloading has finished, Short ATP (Auto Tuner Preset) is started automatically.

- When Short ATP has finished, the lowest channel position at which a broadcast can be tuned in is received.

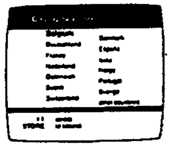
Note:
Download will not work when the VCR is connected to a TV with the "NEXTVIEWLINK", "Easy Link" or "Megalogic"-logo **but without a fully-wired 21-pin scart cable.**
In this case, perform **Auto Setup** on the next page.

Auto Setup

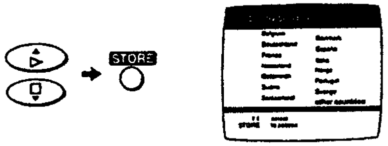
Auto Setup

When the VCR is turned on after connecting to a TV other than a *TV with the "NEXTVIEWLINK", "Easy Link" or "Megalogic"-logo using the fully-wired 21-pin scart cable,* follow the procedure below.

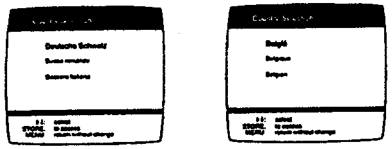
On Screen Display



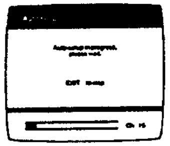
Select the desired country.



- When Switzerland or Belgium has been selected, operation moves to the screen which follows. Select the item in accordance with the language required.

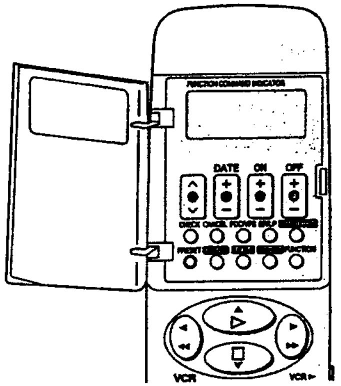


Auto Setup (Auto tuning and Auto clock setting) starts automatically.



- The Auto setup is searching for TV station from VHF minimum to UHF maximum and memorizing the data for every programme position. The other programme positions are skipped.
- The Auto setup takes five or more minutes to complete the search for TV station and the clock setting.

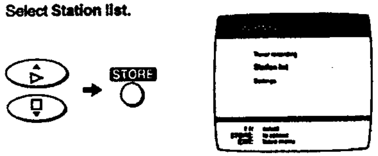
Notes:
- If VCR is not correctly set by Auto setup, see **Various Settings** on pages 35–38.
- Auto clock setting will not work correctly if teletext information is not available. If the clock setting screen appears after auto tuning has been completed, set clock manually. See page 38.
- Clock information is subject to teletext information. If year information is not in teletext or time information in teletext is incorrect, set clock manually. See page 38.



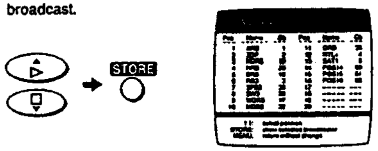
Viewing the TV station list

1 Press **MENU**.

2 Select **Station list**.

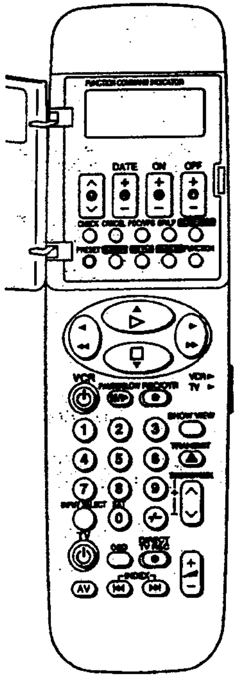


3 Select the desired TV station, if you want to view the broadcast.



Auto Setup Feature Important Information (Only after performing Auto Setup)

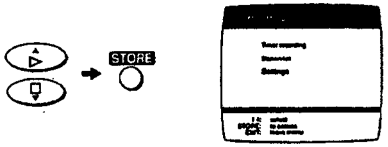
The Auto Setup feature tunes in your channels automatically.
However, under certain circumstances in some transmission areas certain channels may not be assigned a channel name or their normal channel position. If this is the case they will need to be tuned manually. If Auto setup is not successful, please follow the steps below.



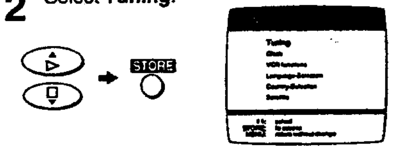
Operations

1 Press **MENU**, and then select **Settings.**

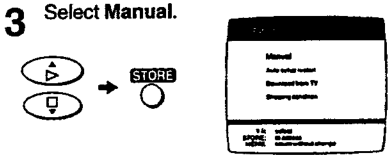
On Screen Display



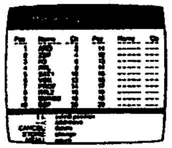
2 Select **Tuning.**



3 Select **Manual.**



4 The STATION LIST is now displayed. (Channel information will vary.)



If all station names are displayed, no manual tuning adjustment is needed.
However, follow the steps on the next page when there is a ∗ mark at the beginning of the station name display, even if the station name is displayed.

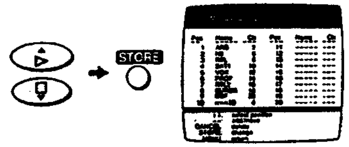
If manual tuning adjustment is required, follow the steps indicated below.

When changing or installing station name;

Operations
Follow steps 1 to 3 on the previous page.

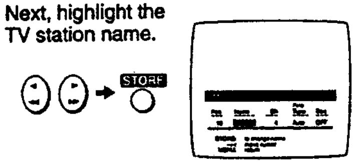
4 Select the station(s) named ∗□□□□.
Establish which channel you are viewing, by checking your TV Guide/ Newspaper.

On Screen Display

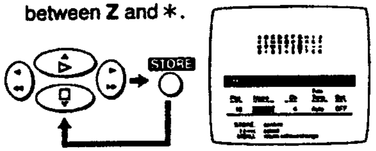


- "□" indicates the position number or station name. This is the same as steps 6 and 7.

5 Next, highlight the TV station name.

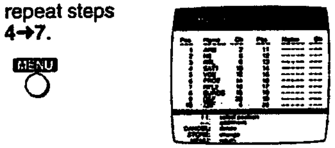


6 Enter characters into **all** five ∗□□□□ positions, from the table using the arrows and press **STORE** after each character. Use blank space if required, to enter a blank select the area between **Z** and ∗.



7 Press **MENU** once.

If any other TV station names are marked ∗□□□□, repeat steps **4→7.**



Note:
See page 36 for changing the programme position.

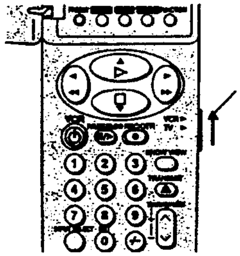
Satellite Settings

Satellite Tuning

When the RF connection of ⑧ on the satellite receiver connection page has been performed, the following settings must be carried out in order to activate satellite control.
These settings are not necessary when the 21-pin cable Ⓐ has been used for the connection. (See page 13.)

Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR.



Set the VCR/ TV switch to VCR to use the numeric buttons.

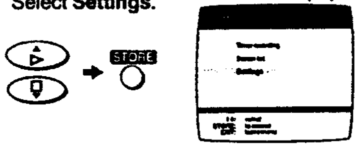
Follow the operation guide on screen display.

Operations

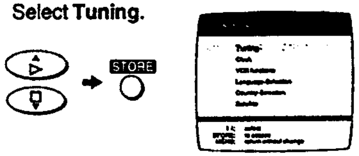
1 Press **MENU.**

2 Select **Settings.**

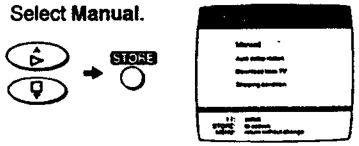
On Screen Display



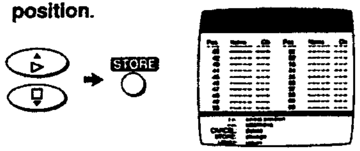
3 Select **Tuning.**



4 Select **Manual.**

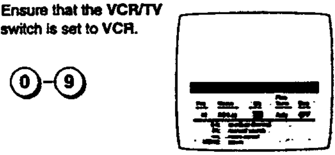


5 Select unoccupied **Programme position.**

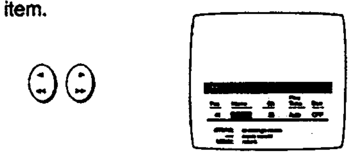


6 Select a channel **(Ch)** on which satellite broadcasts can be viewed.

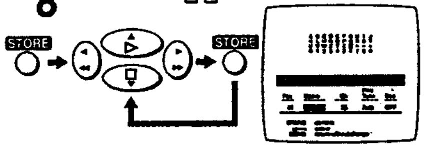
- Ensure that the VCR/TV switch is set to VCR.



7 Select the TV station name **(Name)** item.



8 Enter **"SAT _ _".**



- "_ _" indicates two blank spaces. Enter the space to the right of "Z" on the keyboard.
- "SAT   " is a special term; use it only when a satellite receiver is connected.
- If "SAT   " is already displayed, this step is unnecessary.

9 Press **MENU**, and then press **EXIT.**

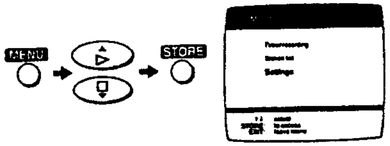
Note:
When **Preset Download (Download from TV)** has been performed, change the name of the channel for viewing the satellite broadcast on the TV to "SAT" instead of executing this page (refer to the operating instructions of the TV). If this step is taken, preset Download is performed again automatically, and the name of the VCR's SAT channel is also changed.

Satellite Setting

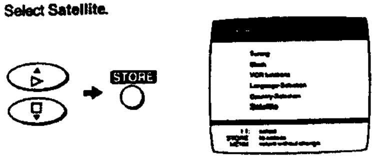
Proceed with the settings described below in order to activate the satellite receiver control functions.
These settings are supported only by the satellite receivers found on the attached list of compatible satellite receivers.

1 Press **MENU**, and then select **Settings**.

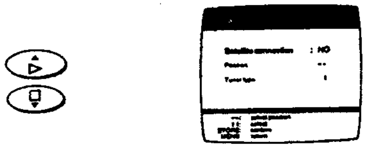
On Screen Display



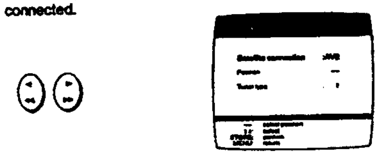
2 Select **Satellite**.



3 Select **Satellite connection**.



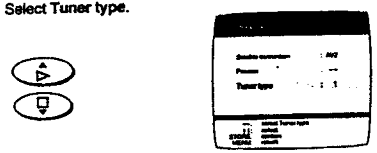
4 Select the position where the satellite receiver is connected.



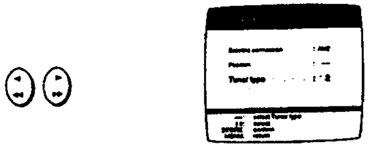
NO: When the satellite receiver is not connected to the VCR.
RF: When the satellite receiver is connected to RF IN socket of the VCR.
AV1: When the satellite receiver is connected to AV1 socket of the VCR.
AV2: When the satellite receiver is connected to AV2 socket of the VCR.

- The **Position** item is also automatically set when RF has bee selected, and cannot be changed here.

5 Select Tuner type.



6 First check the attached list of compatible satellite receivers, and then set the tuner type number.
It is not possible to control a receiver which is not on the attached list of compatible satellite receivers.



- It is also possible to select by pressing numeric button.

7 Press **STORE**, and then press **EXIT**.

Preset Type

The satellite receiver mode must be set before attempting to select satellite channels or perform timer recording. The procedure to set the mode can be divided into the following 5 types by satellite receiver. Check which one applies on the attached list before proceeding.

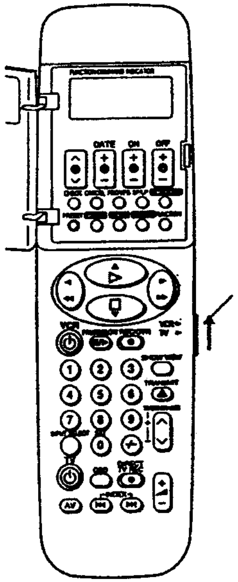
Preset type	Controllable functions
A	Keep the satellite receiver's power ON.
B	No action needs to be taken. (The satellite receiver's power may even be OFF.)
C	After having turned on the satellite receiver's power, select the 2-digit display mode.
D	Turn on the satellite receiver's power, and switch to the tuner used by the VCR.
E	Turn on the satellite receiver's power, and switch to the tuner used by the VCR. Then select the 2-digit display mode for the satellite receiver.

Check out the compatible satellite receiver list on the attached list thoroughly before purchasing a new receiver.

Notes:

- The VCR may not be able to control some products or models of satellite receiver, due to the choice of remote control coding being beyond our control.
- Check that the satellite receiver can be properly controlled.
- Try satellite broadcast timer recording once to check that timer recording works properly.

How to select the satellite channel



Set the VCR/TV switch to VCR to use the numeric buttons.

Press the numeric buttons on the remote controller.

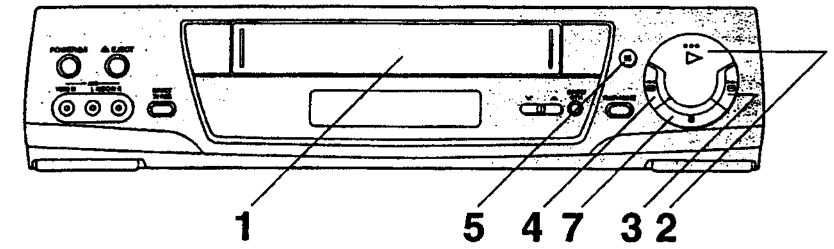
- Ensure that the VCR/TV switch is set to VCR.

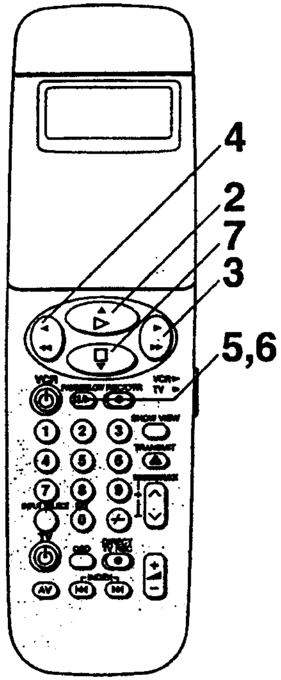
SAT 9: ⓪ – ⓪ – ⑨

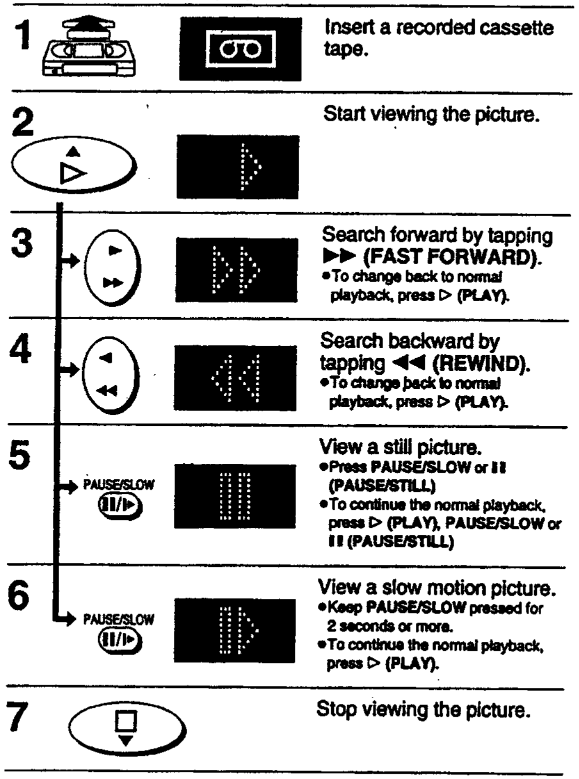
SAT 19: ⓪ – ① – ⑨

- There will be a slight delay after pressing a button before channel change occurs. This is due to signal conversion.
- The range of satellite channels available for selection is 1 through 99.
- With some satellite receivers, it is not possible to select satellite channels up to 99.
- With some satellite receivers, it is not possible to select any more channels beyond the highest number of the channels which can be selected by the satellite receiver if that number is 99 or less.
- With some satellite receivers, it is necessary to leave a short interval after selecting one channel before attempting to select another channel.
- If the display on the satellite receiver fails to indicate the channels, refer to the operating instructions of the satellite receiver and follow the procedure for displaying the channels.

Playback







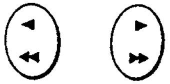
	Operations	Display Symbols	
1			Insert a recorded cassette tape.
2			Start viewing the picture.
3			Search forward by tapping ▶▶ (FAST FORWARD). •To change back to normal playback, press ▷ (PLAY).
4			Search backward by tapping ◀◀ (REWIND). •To change back to normal playback, press ▷ (PLAY).
5	PAUSE/SLOW		View a still picture. •Press PAUSE/SLOW or ❚❚ (PAUSE/STILL) •To continue the normal playback, press ▷ (PLAY), PAUSE/SLOW or ❚❚ (PAUSE/STILL)
6	PAUSE/SLOW		View a slow motion picture. •Keep PAUSE/SLOW pressed for 2 seconds or more. •To continue the normal playback, press ▷ (PLAY).
7			Stop viewing the picture.

Note:
If you keep ▶▶ (FAST FORWARD) or ◀◀ (REWIND) pressed in step 3 or 4, search playback is activated while the button is pressed, and operation returns to normal playback when the button is released.

Other Playback Functions

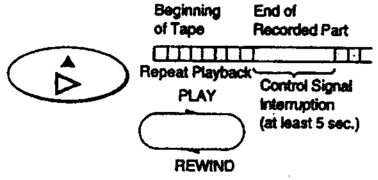
To obtain High Speed Picture during Fast Forward or Rewind

Keep ▶▶ (FAST FORWARD) pressed during fast forward.
Keep ◀◀ (REWIND) pressed during rewind.



To playback the Recorded Part Repeatedly

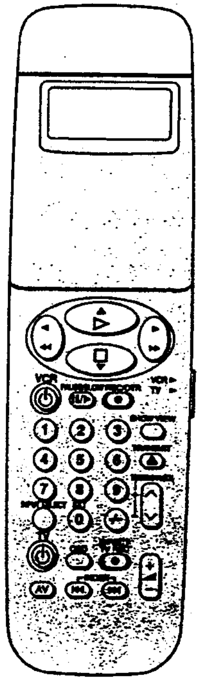
Keep ▷ (PLAY) pressed for 5 seconds or more.
"R" appears on the On Screen display.



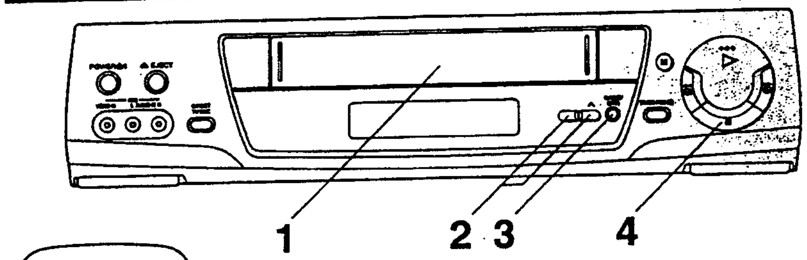
•Press ☐ (STOP) to release from Repeat Playback mode.

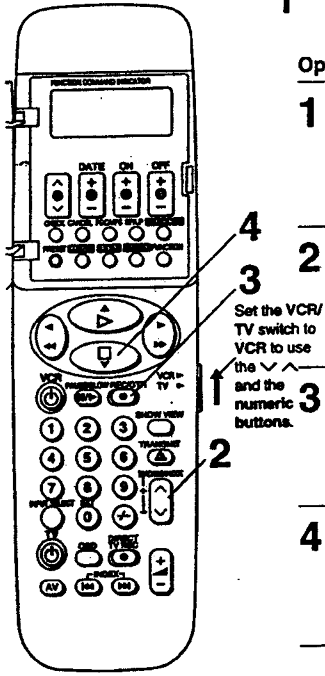
Notes:

- Audio reproduction of linear (conventionally recorded) tapes will be monaural when played back on the FM Hi-Fi video recorders.
- Cue, review or slow playback will be automatically released after 10 minutes, and still playback after 5 minutes.
- In LP mode only:
  1. During any playback mode other than normal playback, the picture may have some noise bars, the colour may be unstable, or a black and white picture may appear.
  2. When playing back a tape which was recorded on another VCR, it may be necessary to adjust the Tracking Control. In some cases the picture quality may still be inferior. This is due to limitation of format.
  3. Depending on the TV set used, the playback picture may roll up or down during special playback (Pause, Cue, Review or Slow playback mode). However, this is not an indication of a malfunction.

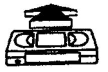
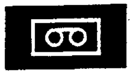


Manual Recording





Set the VCR/TV switch to VCR to use the ∨ ∧ and the numeric buttons.

	Operations	Display Symbols	
1			Insert a video cassette with an intact erasure prevention tab. • If it has already been inserted, press **POWER ⏻/I (VCR ⏻)** to turn the VCR on.
2			Select TV station: • It is also possible to select by pressing numeric button. • Ensure that the VCR/TV switch is set to VCR.
3			Start recording.
4			Stop recording.

To select the Desired Tape Speed

Press **SP/LP** before recording.

To Interrupt Recording

Press **PAUSE/SLOW** or **II (PAUSE/STILL)** during recording.
Press again to continue recording.

To record One TV Programme while Viewing Another Programme

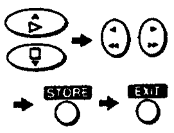
1 Refer to the manual recording operations steps 1 to 3.

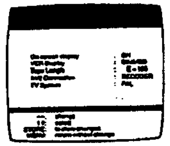
2 Select the TV programme on your TV set you wish to view at the present time.

To display the Approximate Remaining Tape Time

1 Select **Tape Length** from On Screen Display and select the corresponding cassette tape length.
See page 40.

On Screen Display

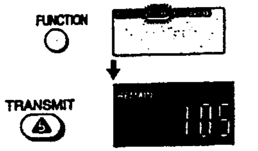




◄ E-180: For E30, -60, -90, -120 and -180 tapes.
E-195: For E195 tape.
E-240: For E240 tape.
E-260 ►: For E260 and -300 tapes.

2 Press **FUNCTION** repeatedly until **DISPLAY** flashes on the remote controller display, and then press **TRANSMIT**.

Display Symbols



→Clock→Counter→**Remaining Tape Time**

- The remaining tape time may not be displayed correctly depending on the tape used.

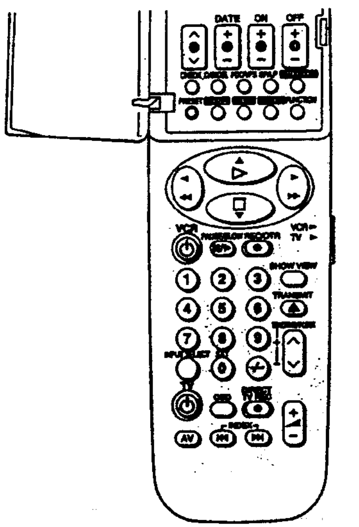
Recording of Stereo and Bilingual Programmes

1 Recording is automatically made in the stereo or bilingual mode. This prevents errors in the selection of the dubbed or the original language.

2 During playback press **FUNCTION** repeatedly until **AUDIO OUT** flashes on the remote controller display, and then press **TRANSMIT** to select the desired sound mode.

FUNCTION
TRANSMIT

Notes:
- When a video cassette with a broken off tab is inserted, the "▬" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.

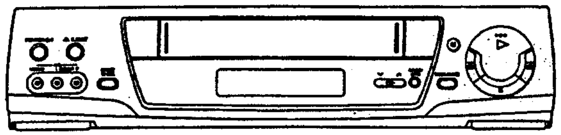


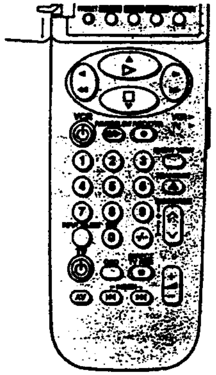
The NICAM Broadcast System (NV-HD625EC only)

NV-HD625EC is equipped with the NICAM sound system also.
NICAM is a 2 Channel sound broadcast system to provide either a high quality stereo sound track or 2 independent MONO sound tracks, M1 and M2.
NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with **AUDIO OUT** (See page 7) during playback.
- The NICAM digital stereo sound can only be recorded on the Hi-Fi audio track.
- To record the regular sound (ordinary normal sound) on the FM audio tracks when a Stereo, Bilingual or NICAM programme is received, select **Mono ON** during manual tuning procedure. See page 35.

Important Note for the NICAM System

When NV-HD625EC is switched on, the tuner will automatically switch to a NICAM broadcast, if NICAM is being transmitted. During test transmissions, it is possible that the sound received doesn't correspond to the picture being viewed. In order to receive a synchronized sound and picture, select monaural sound with **AUDIO OUT** (See page 7) or **Mono ON** setting. This will only apply until NICAM transmissions are fully operational.
Even if the sound track is in MONO, the stereo indicator will appear.





One-Touch Recording (OTR)

Whenever you are in a hurry to start a timer recording with automatic stop in your absence, simply set the recording duration by pressing REC/OTR repeatedly.
The duration indicated on the VCR display changes by pressing REC/OTR as follows:

→Counter display (normal recording mode)→30 (min.)
240 (min.)←180 (min.)←120 (min.)←60 (min.)←

Preparation

Insert a video cassette with an intact erasure prevention tab.

Operations

1 **Ready the video source which is to be recorded, and start recording.**

2 **Press REC/OTR repeatedly to select the desired recording duration.**

REC/OTR

- The VCR will automatically switch off when OTR is completed. To turn the VCR on again, press **POWER ⏻/I (VCR ⏻).**

Notes:
- The OTR function works during normal recording or Direct TV REC.
- When the tape reaches its end during OTR, the VCR will turn itself off.
- To stop OTR at any time, press □ **(STOP)** or **POWER ⏻/I (VCR ⏻).**

Direct TV REC

When you want to record a TV programme while you are watching TV, simply press the **DIRECT TV REC.**

However, this function works only when this VCR is connected to a TV with the **"NEXTVIEWLINK", "Easy Link" or "Megalogic"-logo using the fully-wired 21-pin scart cable.**

Preparation

Insert a video cassette with an intact erasure prevention tab.

Operation

When you are watching TV and you want to record the programme quickly, press the **DIRECT TV REC.**
Then the recording will start.

DIRECT TV REC

- It is not necessary to adjust the programme position of your VCR to the TV station that you are watching now.

Notes:
- Even if the programme positions are not the same, the programme position of the VCR switches to the same position of the TV. Upon completion of the recording, the programme position of the VCR returns to the previous position.
- Do not use **FUNCTION** button's AV LINK function during Direct TV REC, as recording may not be performed normally.
- In some cases, it may not be possible to change the TV channel during Direct TV REC.
- Check beforehand whether the tape may be used for recording.

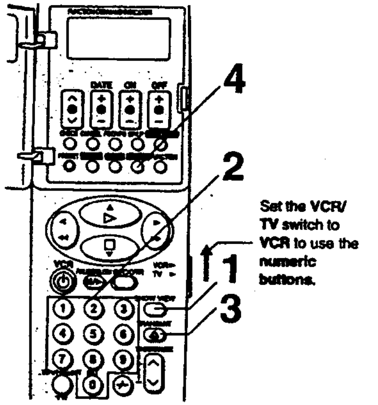
Timer Recording

ShowView Programming

Programming is now easier than ever: simply enter the ShowView number provided in the programme schedule column carried by newspapers and magazines.
ShowView numbers are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these numbers are entered and **TRANSMIT** is pressed, the numbers are converted into the actual programming.

Preparations

- Insert a video cassette with an intact erasure prevention tab.
- Confirm that the TV is on and the VCR viewing channel is selected.



Set the VCR/TV switch to VCR to use the numeric buttons.

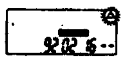
Operations

Display Symbols

1 Press **SHOW VIEW.**

SHOW VIEW

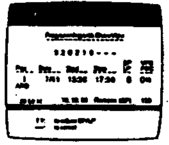
2 Enter a ShowView number.
Example: 920216
- To select the desired tape speed, press **SP/LP** button.



3 Press **TRANSMIT.**

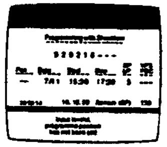
TRANSMIT

On Screen Display



- To extend the ending time or to make any corrections, use buttons ▲ ▼ ◀ ▶ or **PDC/VPS.**
- **See page 31 for PDC/VPS recording.**

If the "—" appears in the programme position:
Select the programme position of your VCR which receives the TV station you entered at step 2 using button ▲ or ▼.



- After several seconds have elapsed, the message display at the bottom of the OSD is replaced by the operation guide display.
- Once programming is performed after the programme position has been selected here, the guide channel will be automatically stored so that the correct position will appear when the ShowView code for this station is next entered.

When satellite broadcasts have been programmed:
Only when first time use ShowView code for Satellite channels, "– –" appears on the programme position item.
In this case, press the **numeric buttons** to input the satellite channel.
- **Press SHOW VIEW to release the ShowView mode.**
- Ensure that the **VCR/TV** switch is set to **VCR.**

SAT 9: ⓪ – ⓪ – ⑨
SAT 19: ⓪ – ① – ⑨

- Once programming is performed after the programme position has been selected here, the guide channel will be automatically stored so that the correct position will appear when the ShowView code for this station is next entered.

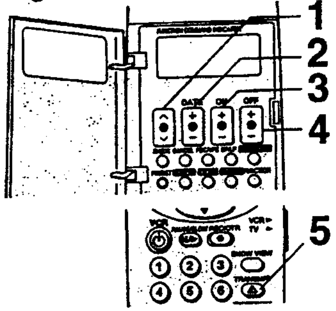
4 Press **STORE** to confirm.

STORE

- The VCR will be in the timer recording standby mode after about 20 seconds, if **STORE** is not pressed.

Notes:
- To release from the standby mode, press **TIMER REC.**
- When the ShowView number is used for programming, the recording time may be slightly longer than the actual programme time.
- When programming two or more programmes, repeat steps 1–4.
- The procedures for checking and cancelling a timer programme are the same as on page 30.

Using the Remote Controller



For Example:

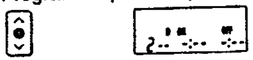
Programme position (channel);	2
Date;	27th, October
Starting time;	20:00
Ending time;	21:30

Preparation

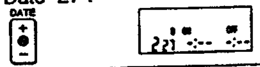
- Insert a video cassette with an intact erasure prevention tab.
- Open the door of the remote controller.

Operations **Display Symbols**

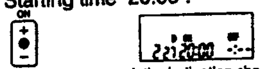
1 Set Programme position (channel) "2".



2 Set Date "27".

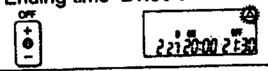


3 Set Starting time "20:00".



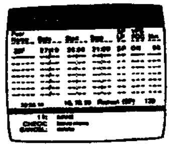
- When it is kept pressed, the indication changes in 30-minute steps.

4 Set Ending time "21:30".



5 Press **TRANSMIT**.

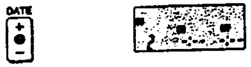
On Screen Display



- The VCR will be in the timer recording standby mode after about 20 seconds.
- To release from the standby mode, press **TIMER REC.**
- See page 31 for PDC/VPS recording.
- To make a change to what has been programmed (for instance, to change **VPS/PDC** to **ON** or **OFF**), follow the procedure for On Screen Display Programming. (See page 29.)

Weekly Timer Recording

In step 2, select the desired day by pressing **DATE –**.
For example, SU (Sunday)



(SU=Sunday, MO=Monday, TU=Tuesday, WE=Wednesday, TH=Thursday, FR=Friday, SA=Saturday)

Daily Timer Recording

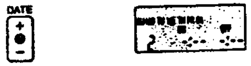
For this timer function, several groups of days can be selected.

Ⓐ Daily recording from Monday to Friday

Ⓑ Daily recording from Monday to Saturday

Ⓒ Daily recording from Sunday to Saturday

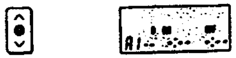
In step 2, select the desired days by pressing **DATE –**.
For example, Ⓒ



Timer Recording from External Signal Source

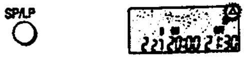
If Timer Recording is performed by a unit connected to the AV1 (TV), AV2 (DECODER/EXT) Socket or AV3 (Audio/Video input sockets), select the A1, A2 or A3 indicator for the programme position.

A1: Through the AV1 (TV) socket.
A2: Through the AV2 (DECODER/EXT) socket.
A3: Through the AV3 (AUDIO IN/VIDEO IN) sockets on front panel.



Selecting the Desired Tape Speed

Press **SP/LP** in any of steps 2–4.



Checking and Cancelling a Timer Programme

The procedures for checking and cancelling a timer programme are the same as on page 30.

Note:
Timer recording of satellite broadcasts cannot be performed using ∨ ∧, **DATE, ON, OFF,** and **TRANSMIT** on the remote controller.

Using On Screen Display

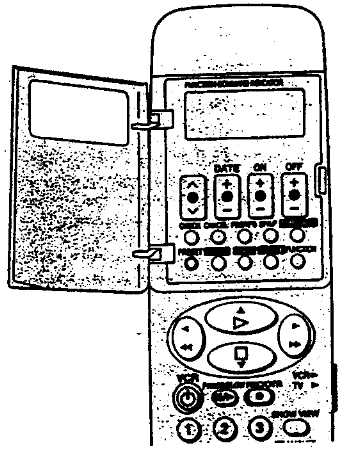
Up to 8 timer programmes can be recorded up to one month in advance by setting the timer, including weekly and daily programmes.

Preparations

- Insert a video cassette with an intact erasure prevention tab.
- Confirm that the TV is on and the VCR viewing channel is selected.

For Example:

Programme position (channel);	2
Date;	27th, October
Starting time;	20:00
Ending time;	21:30
(Present date: 16th, October)	

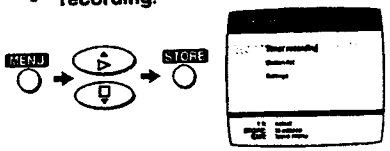


Follow the operation guide on screen display.

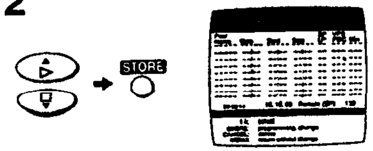
Operations

1 Press **MENU**, and then select **Timer recording.**

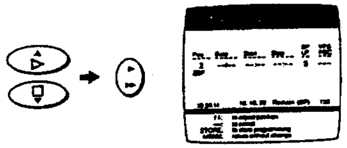
On Screen Display



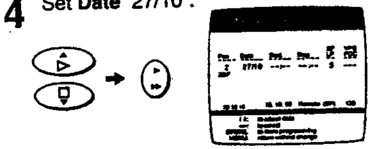
2 Select the unoccupied position.



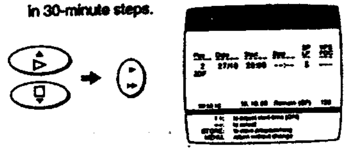
3 Set **Programme position** (channel) "2".
- Press ◀ to return to the previous item.



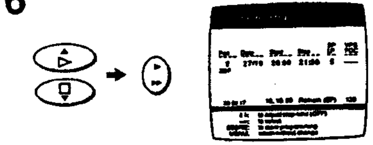
4 Set **Date** "27/10".



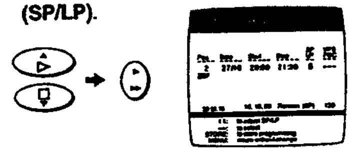
5 Set **Starting time** "20:00".
- When it is kept pressed, the indication changes in 30-minute steps.



6 Set **Ending time** "21:30".

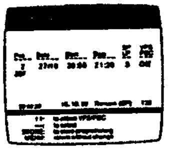


7 Select the desired **Tape speed (SP/LP)**.



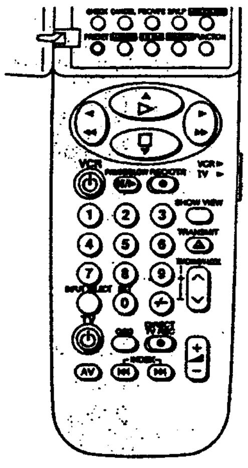
8 Select **VPS/PDC ON** or **OFF** (---).

- See page 31 for PDC/VPS recording.
- During satellite channel programmed recording, VPS/PDC ON cannot be selected.



9 Press **STORE.**

10 To activate timer recording, press **TIMER REC.**


Set the VCR/TV switch to VCR to use the numeric buttons.

Weekly Timer Recording

In step 4, select the desired day by pressing ▼.

Daily Timer Recording

For this timer function, several groups of days can be selected.

Ⓐ Daily recording from Monday to Friday

Ⓑ Daily recording from Monday to Saturday

Ⓒ Daily recording from Sunday to Saturday

In step 4, select the desired days by pressing ▼.

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the AV1 (TV), AV2 (DECODER/EXT) socket or AV3 (Audio/Video input sockets), select the A1, A2 or A3 indicator for the programme position.

A1: Through the AV1 (TV) socket.
A2: Through the AV2 (DECODER/EXT) socket.
A3: Through the AV3 (AUDIO IN/VIDEO IN) sockets on front panel.

Setting other Programmes in Succession

Repeat steps 2–9.

Satellite Channel Programmed Recording

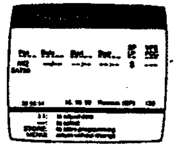
When selecting the programme position (channel), use the numeric buttons to select a satellite channel.

- Ensure that the VCR/TV switch is set to VCR.

SAT 9: SAT ⓪ → SAT ⓪ → ⑨

SAT 19: SAT ⓪ → ① → ⑨

On Screen Display



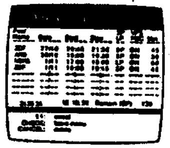
- PDC/VPS programming is not possible in conjunction with satellite programmed recording.
- In the case of some satellite receivers, the power remains off for several seconds when timer recording commences.
- With some satellite receivers, the first several seconds will not be recorded when the timer recording function is used.
- With some satellite receivers, the power goes off if the recording is stopped while timer recording is still underway.

Checking a Timer Programme

- The VCR must be turned on, or the timer recording indicator "⌚" is lit.
- Confirm that the TV is on and the VCR viewing channel is selected.

Press CHECK. CHECK ○

- On Screen Display may be distorted in the PDC/VPS recording standby mode.

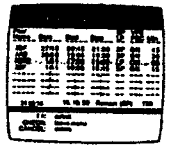


Cancelling a Timer Programme

- The VCR must be turned on or in timer recording standby mode.
- Confirm that the TV is on and the VCR viewing channel is selected.

1 Press CHECK.

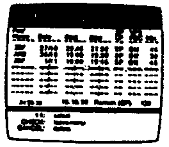
CHECK ○



2 Select the desired timer programme.

3 Press CANCEL.

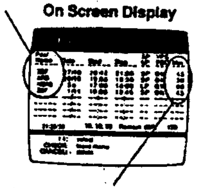
CANCEL ○



Notes:

- If a timer recording is not completed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 A.M. the next day.
  However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 A.M. the next day.
- Either the Position number or the Station name is displayed here.

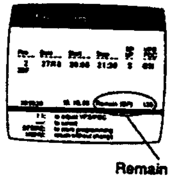
On Screen Display



- For daily and weekly timer recording, the recording time for only one recording session is displayed.

Checking the remaining tape time

- This displays the remaining time for the inserted tape.



Remain time indicator

- This indicator is not displayed unless the remaining tape time has already been indicated on the VCR display. Refer to page 25.

PDC (Programme Delivery Control)/VPS (Video Programme System)

The Programme Delivery Control (PDC) or the Video Programme System (VPS) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news are inserted, the recording will also be interrupted automatically and resumed when the programme continues.

Depending on the signals sent from the broadcasting stations, the PDC/VPS system may not operate properly even when VPS/PDC has been set to ON. Please check with the broadcasters in your area for details.

- In the case of PDC/VPS recording, use the correct time (PDC/VPS time) for recording the TV programmes.
  Set VPS/PDC to OFF when the recording time is not the correct time (PDC/VPS time).
  PDC/VPS recording is not performed when the time (PDC/VPS time) is incorrect, even if only by one minute.
  To find out the correct time (PDC/VPS time), consult Teletext, a newspaper or magazine, etc.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are PDC/VPS controlled), the recording that starts first has always priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the PDC/VPS signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular PDC/VPS signal, the timer recording will be performed in the normal mode (without PDC/VPS) even if it was programmed for PDC/VPS.
  In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- The start times of scheduled programmes listed in the newspaper or magazine may be changed at a later date. Set VPS/PDC to OFF when programming a programme whose start time has been subsequently changed. Particular care must be taken in this respect with ShowView programming since VPS/PDC is automatically set to ON in some countries.
- If a programme listed in a newspaper or magazine has two ShowView numbers, use the ShowView number for VPS/PDC if you wish to proceed with VPS/PDC recording using ShowView programming.
- The default settings for VPS/PDC differ depending on the country concerned. Refer to the table shown below.

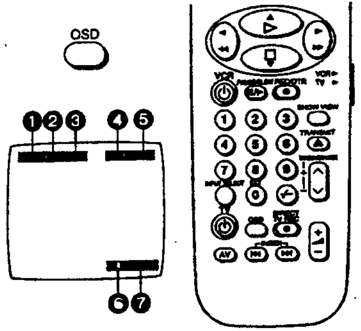
Programming method Country	[illegible] ShowView Program[illegible]	Change[illegible]	[illegible]
[illegible] Sweden, Denmark, Finland, Norway	ON	OFF	OFF
[illegible] Other Countries	ON	ON	ON
Italy, Spain, Portugal	OFF	OFF	OFF

After auto tuning "——" appears for the VPS/PDC item at the outset in the case of a broadcasting station which is not transmitting VPS/PDC signals.

Other Functions

On Screen Display

Press **OSD** to make the On Screen Display appear on the TV screen.



❶ **TV station**

❷ **TV system**

❸ **Stereo or Bilingual Indicator (NV-HD625EG)**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.

Stereo, M1 and M2 Indicator (NV-HD625EC)
When receiving a TV programme with the Stereo, Bilingual or NICAM sound system, the type of sound system in which it is broadcast is automatically indicated.

Stereo:	When receiving a Stereo/NICAM stereo broadcast.
M1 M2:	When receiving a Bilingual/NICAM dual-sound broadcast.
M1:	When receiving a NICAM monaural broadcast.

❹ **Audio Output Mode Indicators**
The Left (L) and Right (R) Indicators show which sound mode is selected with **AUDIO OUT** (see page 7).

Stereo:	Both the L and R Indicators appear.
Left:	The L Indicator appears.
Right:	The R Indicator appears.
Normal:	Both the L and R Indicators don't appear.

❺ **Tape speed Indicator**

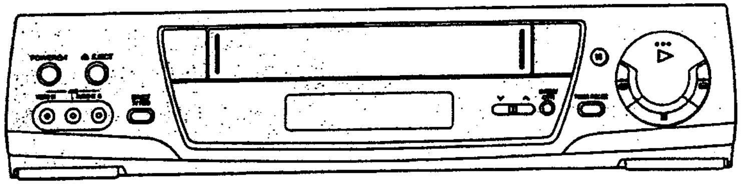
❻ **Tape running display**

Stop, Eject	▮
Rewind	◀◀
Fast Forward	▶▶
Playback	▶
Recording	●
Repeat Playback	R

❼ **Present time/Tape counter/Remaining tap time/ Index Search/One-Touch Recording (OTR)**

Information	Display
Present time	17:24:31
Tape counter	–2:35.47
Remaining tape time	REMAIN 2:34
Index Search	▶▶ 02
One-Touch Recording (OTR)	OTR 60

Notes:
- When the item **"On screen display"** is set to **OFF** (See page 39.), the On Screen Display will not appear.
- When the programme position AV is selected or during playback, the On Screen Display (❶, ❷, ❸) will not appear.
- The On Screen Display does not appear during special playback.



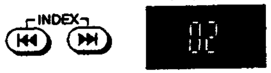
VHS Index Search System

It is very easy to find the beginning of each recording, because a special index signal is recorded at the start of each recorded segment on the tape.

For example:
Searching for the 2nd recorded segment in the forward direction.

Press INDEX ▶▶I twice.
(This operation is performed while the VCR is in the stop mode or normal playback mode.)

Display Symbols



- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press **INDEX I◀◀**.
- Up to 20 index signals can be searched for in both directions.
- When the opposite **INDEX** button is pressed, the number shall be decreased till 1.
- The figure on the display is decremented by 1 each time an index signal is located.
- The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.

Recording Index Signals
Index signals are recorded in following cases.
- When a recording is started by pressing **REC/OTR**.
- When timer recording is activated.

NTSC Playback

Tapes recorded in the NTSC system can be played back with this VCR via a PAL system TV set.
- The playback picture may roll up or down. If the TV set is equipped with a V-HOLD control, it may be possible to stop the picture movement by adjusting this control.
- Depending on the TV set used, the picture may be in black and white. However, this is not an indication of a malfunction.

Other Automatic Functions

Automatic Playback

When a cassette without an erasure prevention tab is inserted, the VCR starts playback automatically.

VCR-off Playback

When the VCR is off, an inserted cassette can be played back by pressing ▷ **(PLAY)**.

Automatic Rewinding

When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.
- During OTR, this function will not work.

Automatic Switching Off and Ejection

When the VCR is switched off, and inserted cassette can be ejected simply by pressing **EJECT**. The VCR will eject the cassette and automatically turn itself off again.

Editing

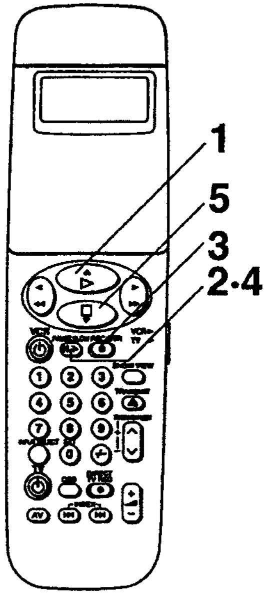
Assembly Editing

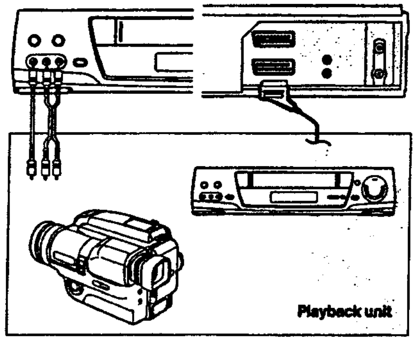
This function can be used to make up an edited tape from other recordings or video sources.

A new scene can be added to the end of a previous one.

Preparations

- Connect a movie camera or another VCR to this VCR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1, A2 or A3.
  A1: Through the AV1 (TV) socket.
  A2: Through the AV2 (DECODER/EXT) socket.
  A3: Through the AV3 (AUDIO IN/VIDEO IN) sockets on front panel.





Operations

1 Search for the end of the previous recording.

2 Press **PAUSE/SLOW** or **II (PAUSE/STILL)**

PAUSE/SLOW

3 Press **REC/OTR** to switch the VCR from the pause modé to the recording standby mode.

REC/OTR

4 Start the new recording by pressing **PAUSE/SLOW** or **II (PAUSE/STILL)** again.

PAUSE/SLOW

5 Press □ **(STOP)** to stop recording.

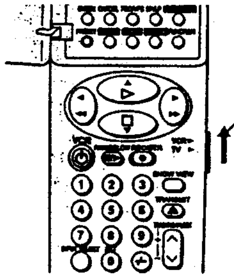
Storing TV Broadcasts into your VCR

Introduction

The VCR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.
If VCR is not correctly tuned by Auto setup, follow the procedure below.

Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR.



Set the **VCR/TV** switch to **VCR** to use the **numeric buttons.**

Manual Tuning Procedure

Follow the operation guide on screen display.

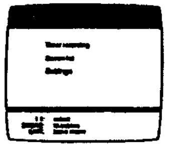
Operations

1 Press **MENU.**

2 Select **Settings.**

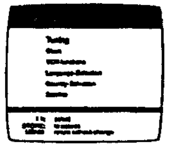
On Screen Display

STORE



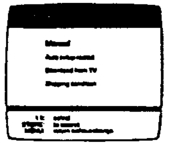
3 Select **Tuning.**

STORE



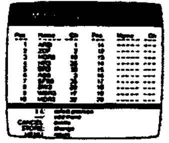
4 Select **Manual.**

STORE



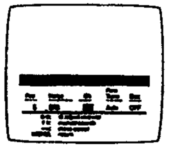
5 Select desired **Programme position.**

STORE



6 Select **Channel (Ch).**
- Ensure that the **VCR/TV** switch is set to **VCR.**

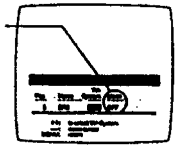
→ 0-9



7 Select **Dec ON** or **Dec OFF.**
ON: To preset pay TV stations.
OFF: To preset normal TV stations.

8 Use ◀ ▶ to display the next screen.
Select **TV-System.**
PAL: For receiving PAL signal.
MESECAM: For receiving SECAM signal.

NV-HD625EC only



9 NV-HD625EC only
Select **Mono OFF.**
- Select **Mono ON** to record the normal sound during a stereo, bilingual or NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.

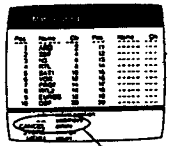
10 Press **MENU**, and then press **EXIT.**

Notes:
- When channels have been set with manual tuning, the channel position (Ch) will need to be entered in the highlighted box the first time ShowView is used.
- When **Preset Download (Download from TV)** has been executed, do not perform Manual Tuning.
  This is because when the tuning contents for the TV are changed, this information is downloaded to the VCR again, thereby erasing the independent contents input by Manual Tuning.

When changing (moving) the programme position, adding "Blank" positions and deleting stations;

These operations can be perfomed easily by following the indications of the On Screen Display.

On Screen Display



Indications

Press ▲ or ▼ to select the desired programme position (station), and then follow the steps indicated below.

←: Press ◀ to add "Blank" position.

→: Press ▶ to change (move) the programme position.

CANCEL: Press **CANCEL** to delete the stations.

- These indications do not appear after performing **Preset Download (Download from TV).**

To change the TV station name:

After Step 5 but before Step 8, select the TV station name (**Name**) item using ◀ ▶, and then make the desired change. (See page 18.)

- No changes can be made to the TV station name while "**SAT** " is displayed when **Satellite Connection** is set to **RF**. (See page 20.)

Channel Plan

Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2–12	*E2–E12	E2–E12
13–20	A–H (Only Italy)	—
21–69	21–69	21–69
74–78	S01–S05	S1–S5
80–82	S1–S3	M1–M3
83–89	S4–S10	M4–M10
90–99	S11–S20	U1–U10
121–141 Hyperband	**S21–S41	S21–S41

*In Italy: H1...(11), H2...(12)

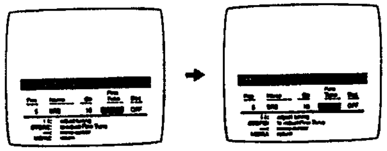
**Only for 8 MHz channel raster

Fine Tuning Procedure

Follow steps 1 to 5 on page 35.

6 Select **Fine Tune.**

7 Press ▲ or ▼ to obtain the best tuning condition.
- To return the tuning to its former state, press **STORE.**

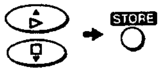


8 Press **MENU**, and then press **EXIT**.

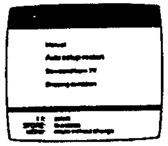
Auto Setup Restart

When your address changes, follow the procedure below.
Follow the steps 1 to 3 on page 35.

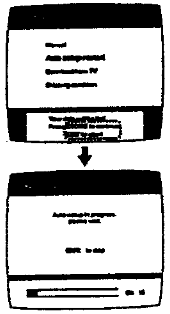
4 **Select Auto setup restart.**



On Screen Display



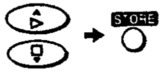
5 Press **STORE.**

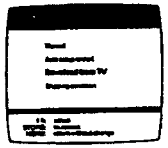


Download from TV

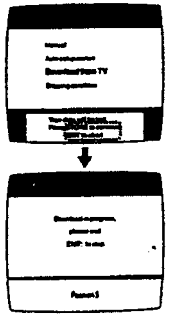
To perform the downloading again, follow the procedure below in the stop mode.
Follow steps 1 to 3 on page 35.

4 **Select Download from TV.**





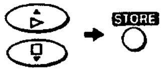
5 **Press STORE.**

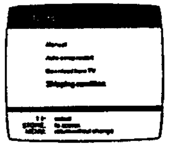


Shipping Condition

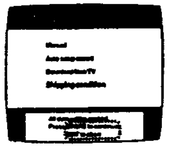
If you want to return the VCR to the factory-preset condition, follow the procedure below.
Follow the steps 1 to 3 on page 35.

4 **Select Shipping condition.**

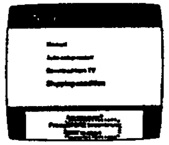




5 Press **STORE.**



6 Press **STORE** again.



Note:
To re-tune the VCR, disconnect and then reconnect the mains lead. If the VCR is off, turn on the VCR and then repeat the procedures on pages 14 to 18.

Setting the Clock of your VCR

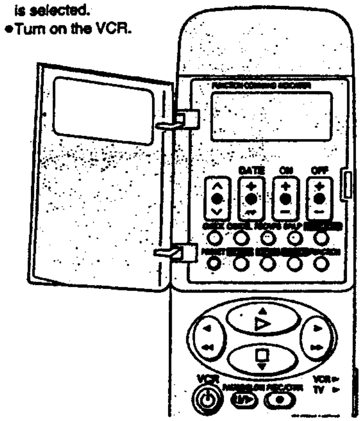
The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

If VCR is not correctly set by Auto setup, follow the procedure below.

Preparations

- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR.

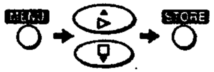


Manual Clock Setting

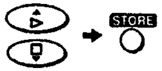
Follow the operation guide on screen display.

Operations

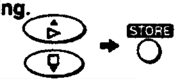
1 Press **MENU**, and then select **Settings**.



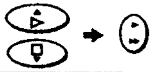
2 Select **Clock**.



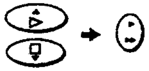
3 Select **Manual setting**.



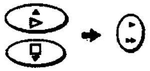
4 Set **Time (H/M)**.
- When it is kept pressed, the indication changes in 30-minute steps.
- Press ◀ to return to the previous item.



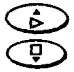
5 Set **Date (D)**.



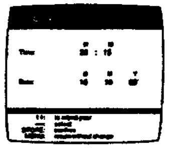
6 Set **Month (M)**.



7 Set **Year (Y)**.
- There is no need to press ▶.



On Screen Display



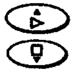
8 Press **STORE**.
- The clock will start.

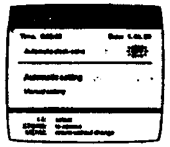
9 Press **EXIT**.

Automatic Clock Setting

Follow steps 1 to 2 of the above procedure.

3 Select Automatic setting.





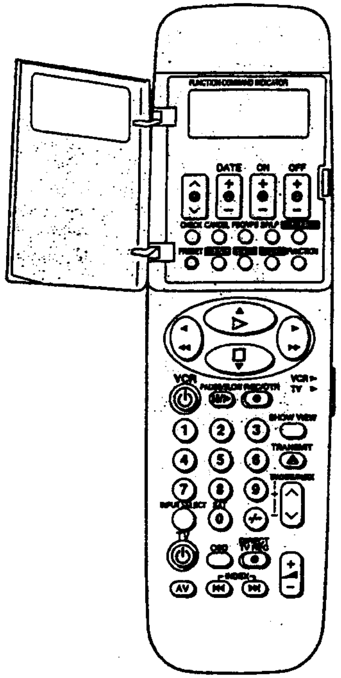
4 Press STORE.
- The clock is set automatically.

Notes:
- The clock operates for at least 60 minutes by its backup system in the event of power failure.
- When the item **"Automatic clock-set is"** is ON on screen display, Automatic time correcting function is activated every day.
  The Automatic time correcting function is only activated when the power is off. This function is not activated during timer recording standby mode.

Settings Using On Screen Display

Preparations

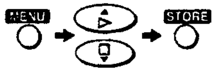
- Confirm that the TV is on and the VCR viewing channel is selected.
- Turn on the VCR.



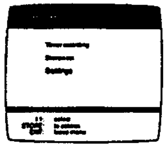
VCR functions

On Screen Display

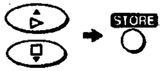
1 **Press MENU, and then select Settings.**

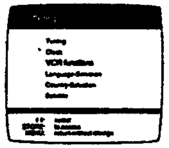


On Screen Display

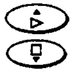


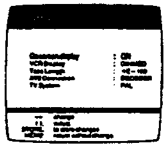
2 Select VCR functions.



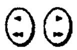


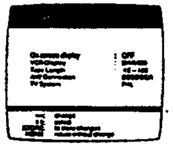
3 Select On screen display.





4 Select ON or OFF.





ON: The On Screen Display will appear on the TV screen by pressing OSD.

OFF: The On Screen Display will not appear even if OSD is pressed.

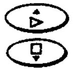
5 Press STORE, and then press EXIT to make On Screen Display disappear.

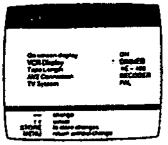
VCR Display

On Screen Display

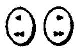
Follow steps 1 and 2 on page 39.

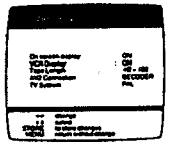
3 Select **VCR Display**.





4 Select **ON**, **OFF** or **DIMMED**.





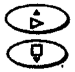
ON:	When VCR is turned off, the characters are lit in the VCR display.
OFF:	When VCR is turned off, the characters are not lit in the VCR display.
DIMMED:	When VCR is turned off, the characters are dimmed in the VCR display.

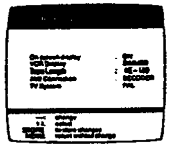
5 Press **STORE**, and then press **EXIT** to make On Screen Display disappear.

To select the Corresponding Cassette Tape Length for Displaying the Approximate Remaining Tape Time

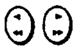
Follow steps 1 and 2 on page 39.

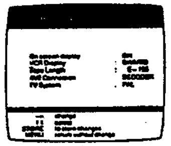
3 Select **Tape Length**.





4 Select the corresponding cassette tape length.





◀ E-180:	For E30, -60, -90, -120 and -180 tapes.
E-195:	For E195 tape.
E-240:	For E240 tape.
E-260 ▶:	For E260 and -300 tapes.

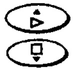
- The times displayed may differ depending on the tape used.

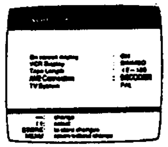
5 Press **STORE**, and then press **EXIT** to make On Screen Display disappear.

AV2 Connection

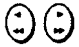
Follow steps 1 and 2 on page 39.

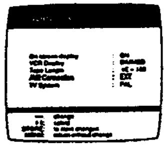
3 Select **AV2 Connection**.





4 Select **EXT** or **DECODER**.





EXT:	When another VCR or a satellite receiver is connected to the AV2 (DECODER/EXT) socket.
DECODER:	When the decoder is connected to the AV2 (DECODER/EXT) socket.

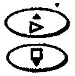
If Satellite connection is set to AV2 (See page 20.), AV2 Connection is set to EXT automatically.

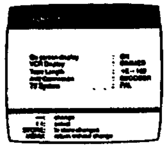
5 Press **STORE**, and then press **EXIT** to make On Screen Display disappear.

To set the Colour TV System

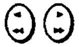
Follow steps 1 and 2 on page 39.

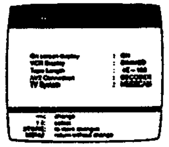
3 Select **TV System**.





4 Select **PAL** or **MESECAM**.



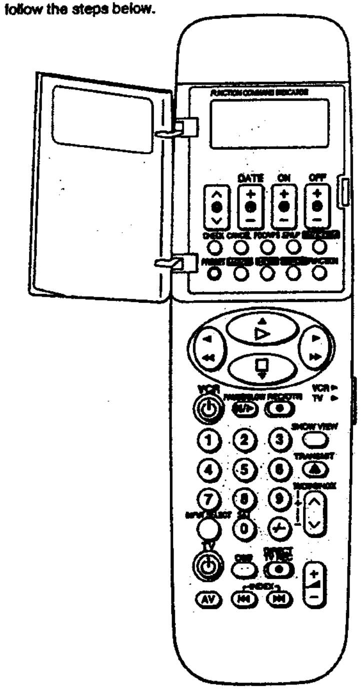


- Set according to the colour TV system used during playback or external recording.

5 Press **STORE**, and then press **EXIT** to make On Screen Display disappear.

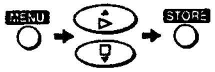
Language-Selection

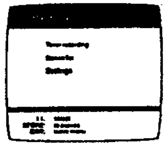
To change the language setting for On Screen Display, follow the steps below.



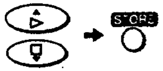
1 Press **MENU**, and then select **Settings**.

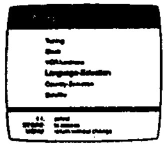
On Screen Display



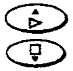


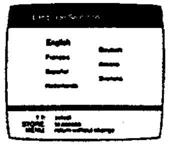
2 Select **Language-Selection**.





3 Select the desired language.



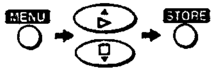


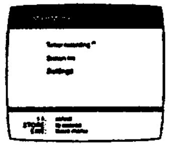
4 Press **STORE**, and then press **EXIT**.

Country-Selection

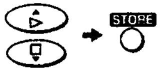
To change the country setting, follow the steps below.

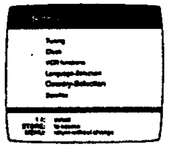
1 Press **MENU**, and then select **Settings**.



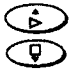


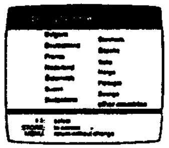
2 Select **Country-Selection**.



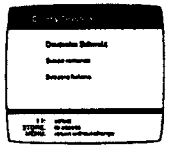


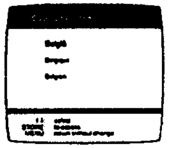
3 Select the desired country.





- When Switzerland or Belgium has been selected, operation moves to the screen which follows. Select the desired item.

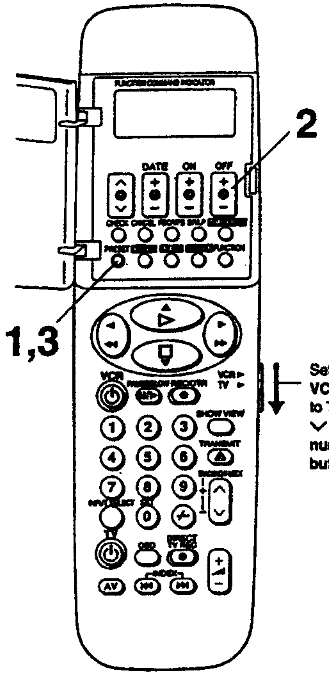




4 Press **STORE**, and then press **EXIT**.

Setting the Remote Controller for Operation of your TV

You can operate some TV manufacturers (see next page) using the supplied Remote Controller after this setting up.



Set the VCR/TV switch to TV to use the ∨ ∧ and the numeric buttons.

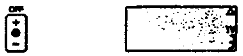
Preparation

Turn on the TV.

Operations **Display Symbols**

1 Keep **PRESET** pressed for more than 2 seconds.

2 Press **OFF** several times.



- When the number matches the manufacturer of your TV, the TV's power is turned off. Read through the information on the following page as well.

3 Press **PRESET.**

- The remote controller display changes as shown.

How to change the number

Each time the "+" side of **OFF** is pressed, the number is counted up by one as follows:

→1→2→3...30—┐

When the "−" side is pressed, the number is counted down by one in the reverse order to that indicated above.

Notes:

- Some TV models cannot be operated using this remote controller.
- Set VCR/TV switch to TV, otherwise you cannot select the programme position of the TV using ∨ ∧ and the numeric buttons of this remote controller.

Number	Manufacturer
1–4	Panasonic
5	GRUNDIG, Blaupunkt, SIEMENS
6	PHILIPS, LOEWE, SAMSUNG, RADIOLA, DUAL, PYE, BUSH, GOODMANS, ELEMIS, CURTIS, SBR
7	SONY
8	METZ
9	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA
10	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS
11	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA
12	FERGUSON, TELEFUNKEN, GOODMANS, SABA
13	TELEFUNKEN
14	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA
15	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA, NORDMENDE, BRANDT
16	TELEFUNKEN
17, 18	HITACHI
19	SIEMENS
20	SAMSUNG
21	ITT, NOKIA, SELECO
22	NOKIA, SALORA
23	MIVAR
24	TOSHIBA
25	SANYO
26	SHARP
27	JVC
28	MITSUBISHI
29, 30	HITACHI

When a TV manufacturer has the plural number
For example, When the number is 1, 2, 3 or 4 (Panasonic):

When the TV's power is turned off in step 2 on previous page, turn it back on and adjust the TV's volume using this remote controller. The volume can be adjusted if the number matches the TV manufacturer. If it is not possible to adjust the TV's volume, try setting the number (1 to 4) to match the TV manufacturer again until the volume can be adjusted.

Note:

FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SIEMENS, SAMSUNG, NOKIA, SABA and HITACHI have plural numbers. Although some models may operate with any of these numbers, other models may operate with only one number. Check each number in turn, and set the optimal number.

SECTION 2
ADJUSTMENT PROCEDURES

2-1 DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

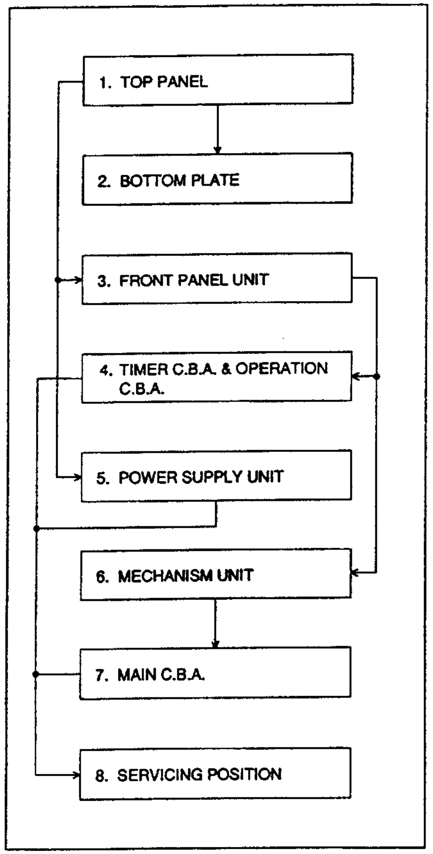

1. TOP PANEL
2. BOTTOM PLATE
3. FRONT PANEL UNIT
4. TIMER C.B.A. & OPERATION C.B.A.
5. POWER SUPPLY UNIT
6. MECHANISM UNIT
7. MAIN C.B.A.
8. SERVICING POSITION

Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove...... 4 Screws (A)

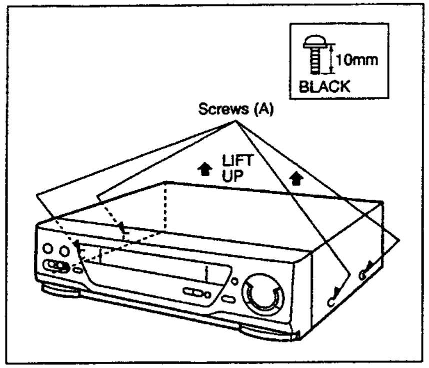

10mm
BLACK
Screws (A)
LIFT UP

Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Unlock .... 6 tabs (B)

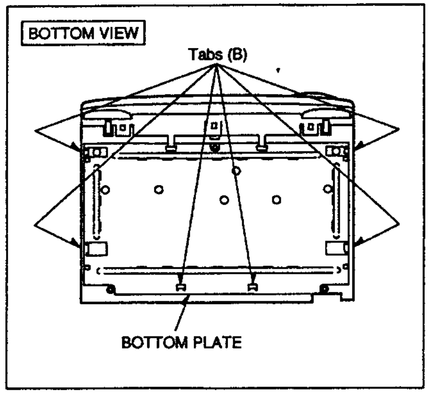

BOTTOM VIEW
Tabs (B)
BOTTOM PLATE

Fig. D3

3. REMOVAL OF THE FRONT PANEL UNIT

Unlock .... 11 Tabs (C)

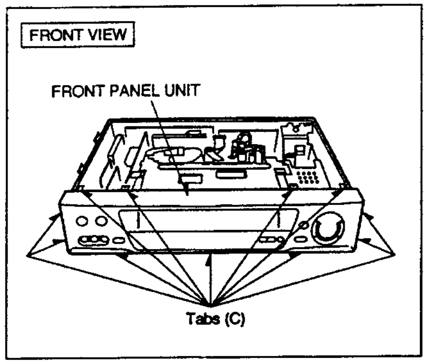

FRONT VIEW
FRONT PANEL UNIT
Tabs (C)

Fig. D4

4. REMOVAL OF THE TIMER C.B.A. & OPERATION C.B.A.

REMOVAL OF THE TIMER C.B.A.
Disconnect........Bridge connector (D)
Unlock............... 5 Tabs (E)

REMOVAL OF THE OPERATION C.B.A.
Disconnect........Bridge connector (D)
Unlock............... 2 Tabs (F)

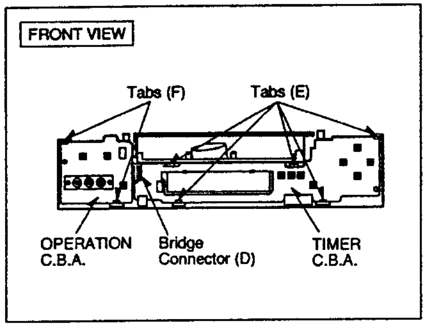

FRONT VIEW
Tabs (F)
Tabs (E)
OPERATION C.B.A.
Bridge Connector (D)
TIMER C.B.A.

Fig. D5

5. REMOVAL OF THE POWER SUPPLY UNIT

Disconnect........Bridge connector (G)
Unlock............... 5 Tabs (H)
Unlock............... 2 Tabs (I)

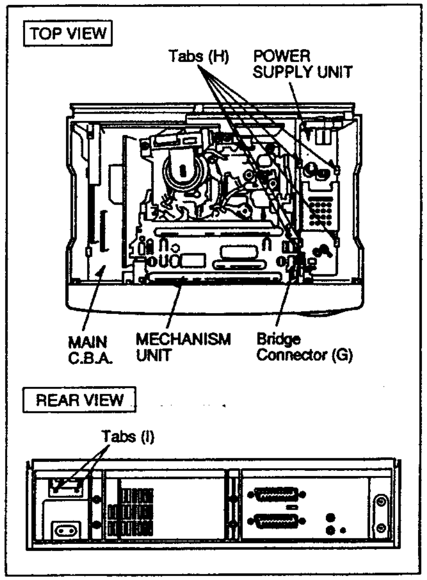

TOP VIEW
Tabs (H)
POWER SUPPLY UNIT
MAIN C.B.A.
MECHANISM UNIT
Bridge Connector (G)
REAR VIEW
Tabs (I)

Fig. D6

CAUTIONS:
Please pay an attention to disconnect the connector (PS3006-P1102) which connected between Main C.B.A. and Power supply unit as shown below.

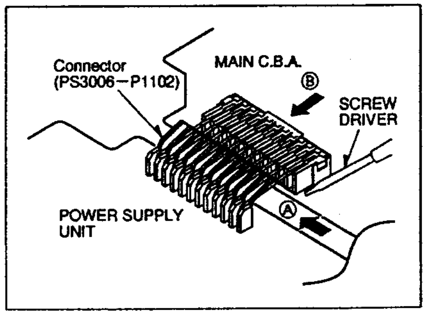

Connector (PS3006−P1102)
MAIN C.B.A.
Ⓑ
SCREW DRIVER
POWER SUPPLY UNIT
Ⓐ

Fig. D7

As above drawing, disconnect the connector by SCREW DRIVER from the direction Ⓐ.
Do not disconnect from direction Ⓑ because it is possibility to damage the parts located by the connector.

6. *REMOVAL OF THE MECHANISM UNIT*

Remove .... 3 Screws (J)
Remove .... Screw (K)

7. REMOVAL OF THE MAIN C.B.A.

Disconnect ... Bridge connector (G) [Fig. D6]
Remove .... 2 Screws (L)
Unlock........... 5 Tabs (M)

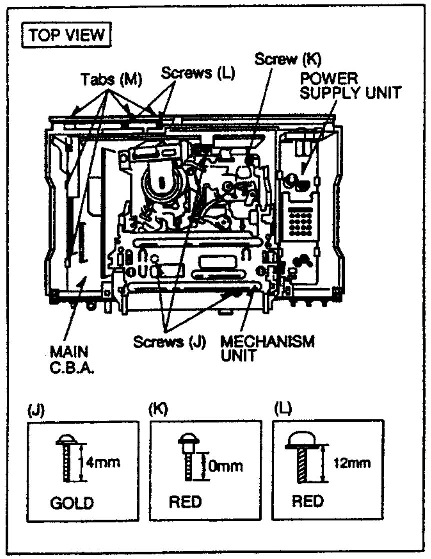

TOP VIEW
Tabs (M)
Screws (L)
Screw (K)
POWER SUPPLY UNIT
MAIN C.B.A.
Screws (J)
MECHANISM UNIT
(J)
4mm
GOLD
(K)
0mm
RED
(L)
12mm
RED

Fig. D8

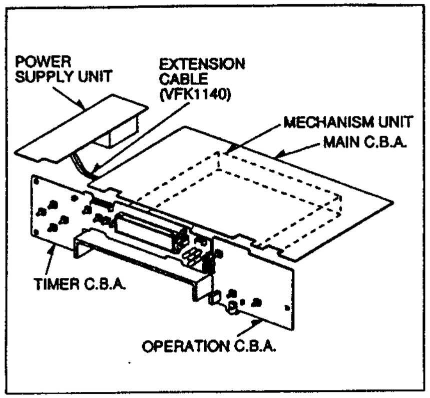

POWER SUPPLY UNIT
EXTENSION CABLE (VFK1140)
MECHANISM UNIT
MAIN C.B.A.
TIMER C.B.A.
OPERATION C.B.A.

Fig. D9

2-2. MECHANICAL ADJUSTMENT
PROCEDURES

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

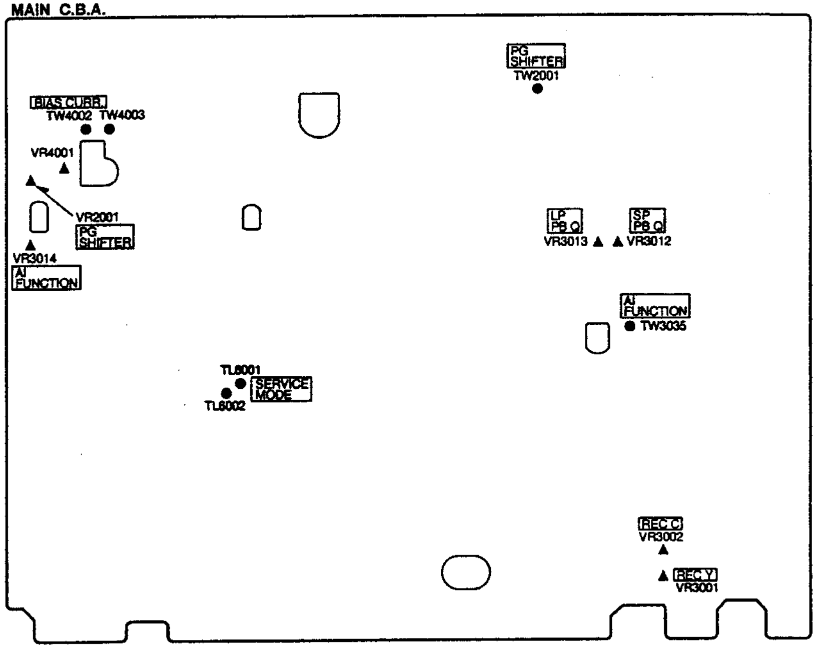
CAUTIONS:

To make a Adjustment Mode for Tape Interchangeability, the Auto Tracking must be turned off.

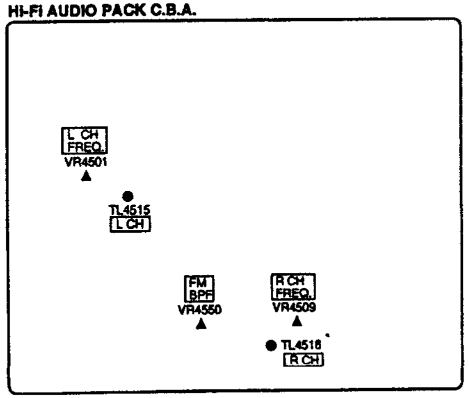
(1) Press the FF and EJECT button to set the Service Mode 2.

LOCATION OF TEST POINTS & CONTROLS

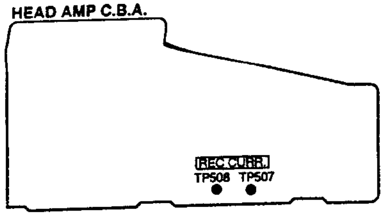
MAIN C.B.A.


PG SHIFTER
TW2001
BIAS CURR.
TW4002
TW4003
VR4001
VR2001
PG SHIFTER
VR3014
AI FUNCTION
LP PB Q
VR3013
SP PB Q
VR3012
AI FUNCTION
TW3035
TL6001
SERVICE MODE
TL6002
REC C
VR3002
REC Y
VR3001

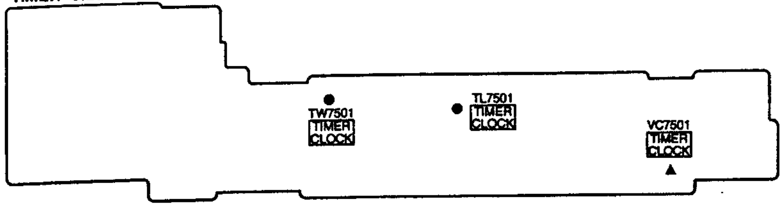
HI-FI AUDIO PACK C.B.A.


L CH FREQ.
VR4501
TL4515
L CH
FM BPF
VR4550
R CH FREQ.
VR4509
TL4518
R CH

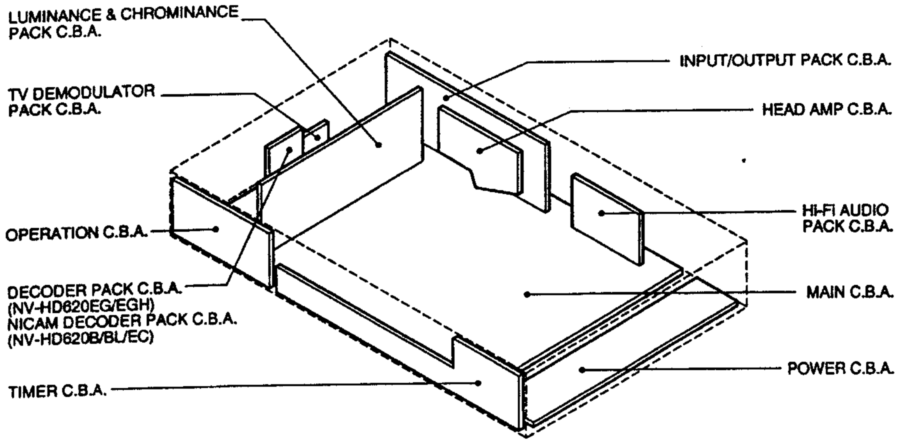
HEAD AMP C.B.A.


REC CURR.
TP508
TP507

TIMER C.B.A.


TW7501
TIMER
CLOCK
TL7501
TIMER
CLOCK
VC7501
TIMER
CLOCK

CIRCUIT BOARD LAYOUT


LUMINANCE & CHROMINANCE PACK C.B.A.
TV DEMODULATOR PACK C.B.A.
OPERATION C.B.A.
DECODER PACK C.B.A. (NV-HD620EG/EGH)
NICAM DECODER PACK C.B.A. (NV-HD620B/BL/EC)
TIMER C.B.A.
INPUT/OUTPUT PACK C.B.A.
HEAD AMP C.B.A.
HI-FI AUDIO PACK C.B.A.
MAIN C.B.A.
POWER C.B.A.

2-3. ELECTRICAL ADJUSTMENT PROCEDURES

2-3-1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope ● Voltage Range: 0.005~5 V/div ● Frequency Range: DC~35 MHz ● Probes: 10:1/1:1	3. Universal Counter	8. Monitor TV
	4. Digital Volt Meter (D.V.M.)	9. DC Power Supply
	5. Video Sweep generator	10. VHS Blank tape
2. Frequency Counter ● Frequency Range: 0~10 MHz ● Probes: 1:1	6. Sinewave Generator	11. VHS Alignment Tape ● Part No.: VFJ8125H3F (PAL) ● Part No.: VFM8080HQFP (NTSC)
	7. Video Pattern Generator	

2-3-2. VCR SETTING

When no indication in the procedure, set each selector as follows.

1. TAPE SPEED: SP
2. CHANNEL: AV1/AV2/AV3 (Set to signal input terminal number)

2-3-3. ADJUSTMENTS

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC.	REMARKS
PG SHIFTER ADJUSTMENT	TW2001/ VIDEO OUT	VR2001	PLAYBACK	—	ALIGNMENT TAPE (PAL)	OSCILLO SCOPE	7.0+−0.5 (H) (See Fig. E1)	
RECORDING CURRENT ADJUSTMENT	TP507 (HOT) TP508 (CLD)	VR3001 (Y) VR3002 (C)	RECORDING	PAL COLOUR BAR	BLANK TAPE	OSCILLO SCOPE	Y: 140+−5 (mVp-p) C: 26+−2 (mVp-p) (See Fig. E2, E3)	1. Adjust the Luminance level until the peak level of V-SYNC is 140+−5mVp-p. 2. When adjusting the Chrominance level, supply +5V DC to PP3001-7 to eliminate Luminance component.
VIDEO FREQUENCY RESPONSE ADJUSTMENT	VIDEO OUT	VR3012 (SP) VR3013 (LP)	SP/LP PLAYBACK (SELF-REC)	VIDEO SWEEP	BLANK TAPE	OSCILLO SCOPE/ VIDEO SWEEP GENE.	SP: 0+−1 (dB) (90~110%) LP: 0+−1 (dB) (90~110%) (See Fig. E5)	1. Set the Video Sweep Signal. (See Fig. E4) 2. Set the CVC SW to OFF position.
AI FUNCTION ADJUSTMENT	TW3035	VR3014	PLAYBACK (SELF-REC)	PAL COLOUR BAR	BLANK TAPE	D.V.M.	2.5+−0.3 (V)	
BIAS CURRENT ADJUSTMENT	TW4002 (HOT) TW4003 (CLD)	VR4001	RECORDING	—	BLANK TAPE	D.V.M.	2.5+−0.1 (mVrms)	1. Connect the Audio Input and GND.
CARRIER FREQUENCY ADJUSTMENT	TL4515 (L) TL4516 (R)	VR4501 VR4509	RECORDING	—	BLANK TAPE	FREQ. COUNTER	L: 1400+−0.003 (KHz) R: 1800+−0.003 (KHz)	

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC.	REMARKS
FM BPF ADJUSTMENT	TL4515 (L) TL4516 (R)	VR4550	PLAYBACK	SINEWAVE 1.608MHz 400mVp-p (PK4002-5)	ALIGNMENT TAPE	OSCILLO SCOPE/ SINEWAVE GENE.	TL4515 (L)=TL4516 (R)	1. Disconnect P501. 2. The GND lead of oscilloscope must be connected to GND on HIFI Audio C.B.A. to reduce the nise. 3. Supply the sinewave signal (1.608MHz/400mVp-p) to PK4002-5. 4. After this adjustment, connect P501.
TIMER REFERENCE CLOCK ADJUSTMENT	TL7501 (TW7501)	VC7501	STOP	—	—	UNIV. COUNTER	7812.5+−0.015 (usec)	

2-3-4. FIGURES

Fig. E1

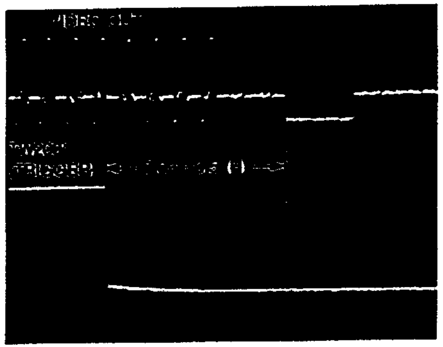


Fig. E2

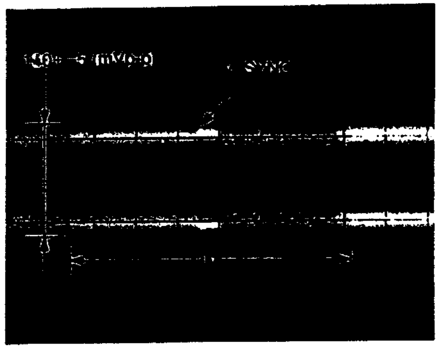


Fig. E3

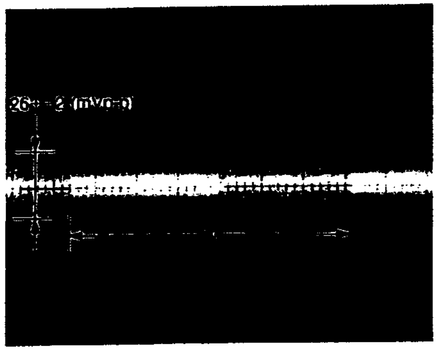
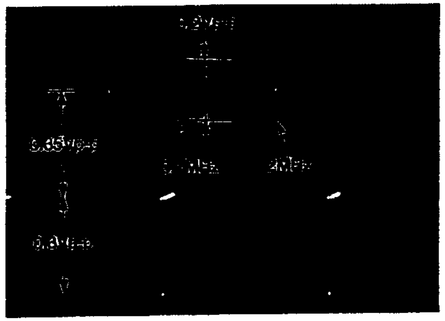
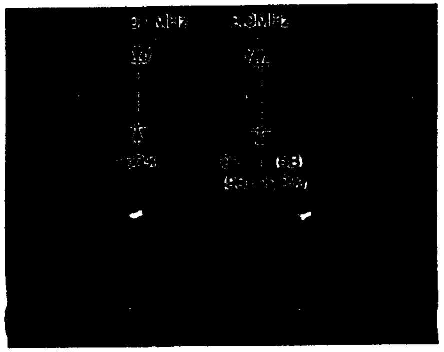


Fig. E4



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E5



SECTION 3
BLOCK DIAGRAMS & SCHEMATIC DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ	BIL	BILINGUAL
A. COMP	AUDIO COMPONENT SIGNAL	BIL [L]	BILINGUAL Ⓛ
A. COMPO	AUDIO COMPONENT SIGNAL	BIL. [H]	BILINGUAL Ⓗ
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ	BIL/M1 [L]	BILINGUAL Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ	BS CLOCK	BS CLOCK
A. DEF [S]	AUDIO DEFEAT	BS DATA	BS DATA
A. DEF [S] [L]	AUDIO DEFEAT	BS LCH IN	BS L CHANNEL INPUT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ	BS MIX [H]	BS MIX Ⓗ
A. DUB [H]	AUDIO DUBBING Ⓗ	BS MON [H]	BS MONITOR Ⓗ
A. ERASE	AUDIO ERASE	BS MONI [H]	BS MONITOR Ⓗ
A. H. SW	AUDIO HEAD SWITCHING PULSE	BS RCH IN	BS R CHANNEL INPUT
A. HEAD [R]	AUDIO HEAD (REC)	BS VIDEO	BS VIDEO SIGNAL
A. HEAD [W]	AUDIO HEAD (PLAY)	BS VIDEO/BS1	BS VIDEO SIGNAL
A. IN [L]	AUDIO INPUT (L)	BS [H]	BS Ⓗ
A. IN [R]	AUDIO INPUT (R)	BS. LEVEL	BS LEVEL
A. MUT [H]	AUDIO MUTE Ⓗ	BS. M [H]	BS MONITOR Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ	BS/VTR [H]	BS/VTR Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)	BUS CLK	BUS CLOCK
A. OUT [R]	AUDIO OUTPUT (R)	BUS LSN	BUS LISTEN
A. RF OUT	AUDIO RF SIGNAL OUTPUT	BUS TLK	BUS TALK
A/VS/S. DATA	AV SW/SERIAL DATA	BUZZER	BUZZER
AC ONLINE	AC ONLINE	CAP EC	CAPSTAN TORQUE CONTROL
AC. O/EE. H	AC ONLINE/EE Ⓗ	CAP M GND	CAPSTAN MOTOR GND
AFC S C	AFC S CURVE	CAP. ET	CAPSTAN TORQUE CONTROL
AFC [S]	AFC S CURVE	CAP. FG1	CAPSTAN FG1 PULSE
AFC. DEF	AFC DEFEAT	CAP. FG2	CAPSTAN FG2 PULSE
ARFC OUT	AUDIO RF SIGNAL OUTPUT	CAS. SW	CASSETTE SW
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL	CCN	PLAYBACK CONTROL SIGNAL (−)
ART. V. MM	ARTIFICIAL VERTICAL SYNC	CCP	PLAYBACK CONTROL SIGNAL (+)
	SIGNAL MONO MULTI	CHM	CONTROL SIGNAL (+)
ART. V/H/N	ARTIFICIAL VERTICAL SYNC	CHP	CONTROL SIGNAL (−)
	SIGNAL Ⓗ/NORMAL	CINEM [L]	CINEMA Ⓛ
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL	CINEMA [L]	CINEMA Ⓛ
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE	CINEMA/MIX	CINEMA/MIX
AUDIO IN [L]	AUDIO INPUT (L)	CKL	RATCH LOCK
AUDIO IN [R]	AUDIO INPUT (R)	CKS	SHIFT LOCK
AUDIO OUT [L]	AUDIO OUTPUT (L)	CL	CLOCK
AUDIO OUT [R]	AUDIO OUTPUT (R)	CLK	CLOCK
AUDIO SELECT [H]	AUDIO SELECT Ⓗ	CLK (C.G)	CLOCK
AUDIO. L	AUDIO (L)	CLOCK. IN	CLOCK INPUT
AUDIO. R	AUDIO (R)	CLP	CLAMP
AV CNT	AV CONTROL	COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
AV CTL	AV CONTROL	COLOR [H]	COLOUR Ⓗ
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK	CONV	CONVERTOR
AV. C.M.	AV CONTROL MODE	CS	CHIP SELECT
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)	CTL GND	CONTROL GND
AVSW/METER. L	AV SW/LEVEL METER (L)	CTL HEAD [+]	CONTROL HEAD (+)
B MODE. H	B MODE Ⓗ	CTL HEAD [−]	CONTROL HEAD (−)
B.G.P	BURST GATE PULSE	CTL [+]	CONTROL HEAD (+)
BACKUP 5V	BACK UP 5V	CTL [−]	CONTROL HEAD (−)
BAND. U.E.	BAND U	CUE BIAS	CUE BIAS
BANDVL. D	BAND VL	CURRENT LIM	CURRENT LIMMITER
BI/MI [L]	BILINGUAL/MIX Ⓛ	CYL ET	CYLINDER TORQUE CONTROL

CYL GND	CYLINDER GND	FULL. E. 12V	FULL ERASE 12V
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ	GND [A]	GND (ANALOG)
D. FM REC [L]	DELAIED FM RECORDING Ⓛ	GND [TU]	GND (TUNER)
D. GND	DIGITAL GND	GND/N. SW. 12V	GND/NON SW 12V
D. REC [H]	DELAYED RECORDING Ⓗ	H. SYNC	HORIZONTAL SYNC
D4/S. LED	D4/STILL LED	H. AMP. SW	HEAD AMP SW PULSE
D4/STILLED	D4/STILL LED	H. P <R>	HEAD PHONE (R)
DAC [CLK]	TUNER DAC (CLOCK)	H. P <L>	HEAD PHONE (L)
DAC/FSCS	TUNER DAC/FS CHIP SELECT	H. P GND	HEAD PHONE GND
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ	H. P OUT [L]	HEAD PHONE OUTPUT (L)
DATA	DATA	H. P OUT [R]	HEAD PHONE OUTPUT (R)
DECODER [L]	DECODER (L)	H. SW	HEAD SW PULSE
DECODER [R]	DECODER (R)	HEAD PHONE [L]	HEAD PHONE (L)
DEW	DEW	HEAD PHONE [R]	HEAD PHONE (R)
DEW SNS	DEW SENSOR	HEAD SW	HEAD SW
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ	HEATER [+]	HEATER (+)
E. REC 5V	EXCEPT RECORDING 5V	HEATER [−]	HEATER (−)
EC	ERROR TORQUE CONTROL	HSS	HORIZONTAL SYNC SIGNAL
ECR	ERROR TORQUE CONTROL	HTR [+]	HEATER (+)
	REFERENCE VOLTAGE	HTR [−]	HEATER (−)
EDT TRIG [L]	EDIT TRIGGER Ⓛ	I RFE	REFERENCE CURRENT
EDIT [H]	EDIT Ⓗ	ICL	CONTROL AGC CIRCUIT
EE [H]	EE Ⓗ	IF	INTERMEDIATE FREQUENCY
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ	IN SELA1	INPUT SELECT A1 POSITION
EE. VV. TR	EE/VV/TRICK PLAY	IN SELA2	INPUT SELECT A2 POSITION
EJECT. PO	EJECT POSITION	IN SELA3	INPUT SELECT A3 POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK	INS L/R [L]	INSERT Lch/Rch Ⓛ
ENV. SEL	ENVELOPE SELECT	INS. [H]	INSERT Ⓗ
ENVE. OUT	ENVELOPE OUTPUT	INSEL A1	INPUT SELECT A1 POSITION
ENVE. SEL	ENVELOPE SELECT	INSEL A2	INPUT SELECT A2 POSITION
ENV SELECT	ENVELOPE SELECT	INSERT	INSERT
EP [H]	LP Ⓗ	INSERT [H]	INSERT Ⓗ
EP/LP [H]	LP Ⓗ	IO CS	INPUT/OUTPUT CHIP SELECT
EP/LP/SP	LP/SP	JOG1	JOG1
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ	JOG S3 LED/FOWRD	JOG LED/FORWARD LED
EPROMCS	EPROM CHIP SELECT	JOG/F. LED	JOG LED/FORWARD LED
EX. REC 5V	EXCEPT RECORDING 5V	JSB [H]	JSB Ⓗ
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ	JST. CLCK	JUST CLOCK
FG1 IN	FG1 PULSE INPUT	JST. CLK	JUST CLOCK
FG2 IN	FG2 PULSE INPUT	JST. CLOCK	JUST CLOCK
FILTER ADJUSTMENT	FILTER ADJUSTMENT	L. OUT	Lch OUTPUT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ	L. CH [H]	Lch Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ	L. CH [L]	Lch Ⓛ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ	LED (MAIN)	LED (MAIN)
FM MUT [H]	FM AUDIO MUTE Ⓗ	LED (STEREO)	LED (STEREO)
FM MUTE [H]	FM AUDIO MUTE Ⓗ	LED (SUB)	LED (SUB)
FM OUT [L]	FM OUTPUT (L)	LED CKL	LED SERIAL CLOCK
FM OUT [R]	FM OUTPUT (R)	LED CKS	LED SERIAL CLOCK
FM PACK OUT [L]	FM PACK OUTPUT (L)	LED DATA	LED SERIAL DATA
FM PACK OUT [R]	FM PACK OUTPUT (R)	LINE IN 1 [L]	LINE INPUT 1 (L)
FM/BS SEL [L]	FM/BS SELECT (L)	LINE IN 1 [R]	LINE INPUT 1 (R)
FM/BS SEL [R]	FM/BS SELECT (R)	LINE IN 2 [L]	LINE INPUT 2 (L)
FS. CLK	FS CLOCK	LINE IN 2 [R]	LINE INPUT 2 (R)
FUL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN V	LINE INPUT VIDEO
FULL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN [L]	LINE INPUT (L)

LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	*LINE OUTPUT (L)*
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ
LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT

P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	*POWER OFF Ⓛ*
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOTOR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [−]	REVIEW MOTOR (−)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL

RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ

SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	REFERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

INPUT/OUTPUT CHART FOR IC6001

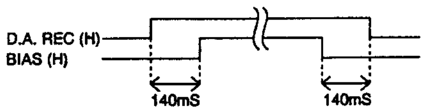
Pin Number	Input/Output	Port Name	Function
1	O	2H (H)	This port is high in SP mode.
2	O	FM MUTE (H)	This port is high during special playback (CUE, REV, SLOW, STILL) mode.
3	O	AUDIO MUTE (H)	This port is high during special playback (CUE, REV, SLOW, STILL) mode.
4	O	EDIT (H)	This port is high during edit.
5	O	VIDEO EE (L)	This port is low during EE mode.
6	O	VA	Input signal select. VCR IN | VA | VB TUNER | L | L AV1 | H | L AV2 | L | H AV3 | H | H SAT | L | L
7	O	VB	
8	O	V. CHANGE (H)	This port is high while the loading motor torque is increased in FF and REW modes.
9	O	LM LIMIT (H)	Loading motor torque limiter output.
10	O	FF/REW (L)	This port is low during FF and REW modes.
11	O	UNLOADING (H)	This port is high while the mechanism is unloaded.
12	O	LOADING (H)	This port is high while the mechanism is loaded.
13	O	D.A. REC (H)	Normal audio recording control. 
14	O	BIAS (H)	
15	O	RGB	BLANKING signal output select. RGB SW OFF: HIGH RGB SW ON : LOW
16	I	SHORT CHECK (H)	DC voltage (BIAS (H)) detection. ● When the low voltage is detected in recording mode, the VCR is turned off. ● When the high voltage is detected in except recording mode, the VCR is turned off.
17	I	S-VHS PB (H)	This port is high during S-VHS playback.
18	O	PB AI2 (H)	AI playback control.
19	O	PB AI1 (H)	AI playback control.

Fig. MP1

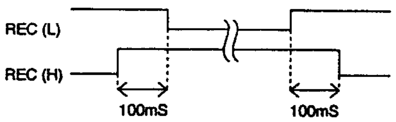
Pin Number	Input/Output	Port Name	Function
20	I	S-TAB (L)	This port is low while the cassette tape with safety tab is inserted.
21	I	ABS NORM IN	HIFI audio mode detection. ● When the low voltage is detected, the audio output is compulsory normal audio mode.
22	I	NC	Not used (Low setting)
23	I	CPB	AV2 PB (H) setting detection for I/O circuit control. ● This port is high when AV2 PB (H) is set to high. ● This port is low when AV2 PB (H) is set to low.
24	I	REC AI (L)	AI mode selection. AI PB ONLY : HIGH AI PB AND REC : LOW
25	I	RESET (L)	This port is low while IC6001 is reset.
26	I	MODE SEL	Active mode selection for microprocessor.
27	I	NC	Not used (Low setting)
28	I	B	Initial setting for 21 PIN Skirt Jack. B MODEL : HIGH EXCEPT B MODEL: LOW
29	O	LINE (L)	Input signal control for HIFI audio circuit. MIC/TUNER: HIGH LINE : LOW
30	O	REC (L)	DC voltage control for recording mode. 
31	O	REC (H)	
32	O	A. DUB (H)	This port is high during audio dubbing mode.
33	O	SAT (H)	This port is high during VCR receive the SAT signal.
34	O	TV	Output signal control for AV1. SIGNAL FROM VCR: HIGH SIGNAL FROM AV2 : LOW
35	O	SYSTEM 4	Refer to Fig. MP. 7
36	O	SYSTEM 5	Refer to Fig. MP. 7
37	I	DIGITAL 5V	VDD
38	O	12MHz OUT	Oscillator output.
39	I	12MHz IN	Oscillator input.

Fig. MP2

<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>40</td><td>O</td><td>32KHz OUT</td><td>Oscillator output.</td></tr>
<tr><td>41</td><td>I</td><td>32KHz IN</td><td>Oscillator input.</td></tr>
<tr><td>42</td><td>I</td><td>DIGITAL GND</td><td>GND</td></tr>
<tr><td>43</td><td>O</td><td>FULL ERASE (H)</td><td>Full erase on/off control.
ON : HIGH
OFF: LOW</td></tr>
<tr><td>44</td><td>O</td><td>D. REC (H)</td><td>Video signal recording on/off control.</td></tr>
<tr><td>45</td><td>O</td><td>D. FM. REC (H)</td><td>HIFI audio signal recording on/off control.</td></tr>
<tr><td>46</td><td>O</td><td>C. EMPHASYS (H)</td><td>This port supplies high signal during a certain time (refer to following chart) from starting the recording to control the HIFI audio recording current.
<table>
<tr><th>TAPE SPEED</th><th>OUTPUT</th></tr>
<tr><td>NTSC 2H</td><td>6 sec</td></tr>
<tr><td>NTSC 4H</td><td>12 sec</td></tr>
<tr><td>NTSC 6H</td><td>18 sec</td></tr>
<tr><td>PAL 3H</td><td>9 sec</td></tr>
<tr><td>PAL 6H</td><td>18 sec</td></tr>
</table></td></tr>
<tr><td>47</td><td>O</td><td>REC CUR 1</td><td rowspan="3">AI REC current switching signal output.</td></tr>
<tr><td>48</td><td>O</td><td>REC CUR 2</td></tr>
<tr><td>49</td><td>O</td><td>REC CUR 3</td></tr>
<tr><td>50</td><td>O</td><td>A. H. SW</td><td>HIFI audio head switching signal output.</td></tr>
<tr><td>51</td><td>O</td><td>S. DATA OUT</td><td>Serial data output.</td></tr>
<tr><td>52</td><td>I</td><td>S. DATA IN</td><td>Serial data input.</td></tr>
<tr><td>53</td><td>O</td><td>S. CLOCK</td><td>Serial clock output.</td></tr>
<tr><td>54</td><td>O</td><td>5P S. DATA OUT</td><td>EDIT 5P serial data output.</td></tr>
<tr><td>55</td><td>I</td><td>5P S. DATA IN</td><td>EDIT 5P serial data input.</td></tr>
<tr><td>56</td><td>O</td><td>5P S. CLOCK</td><td>EDIT 5P serial clock output.</td></tr>
<tr><td>57</td><td>O</td><td>CAP R/S/F</td><td>Capstan rotation direction control.
REVERSE: HIGH
STOP : MIDDLE
FOWARD : LOW</td></tr>
<tr><td>58</td><td>O</td><td>CURRENT LIMIT</td><td>Capstan motor current limitter output.</td></tr>
<tr><td>59</td><td>O</td><td>ENV2</td><td>AI PB control signal output.</td></tr>
</table>

Fig. MP3

<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>60</td><td>O</td><td>PIC VR OUT</td><td>This port supplies the voltage which depends on picture VR setting.</td></tr>
<tr><td>61</td><td>O</td><td>ART V/H/N</td><td>This port supplies artificial vertical sync signal to stabilize the picture in special playback mode.</td></tr>
<tr><td>62</td><td>O</td><td>VIDEO H. SW</td><td>Video head switching signal output.</td></tr>
<tr><td>63</td><td>O</td><td>ROTARY SW</td><td>Rotary switching signal output.</td></tr>
<tr><td>64</td><td>O</td><td>H. AMP. SW</td><td>Head amp switching signal output.</td></tr>
<tr><td>65</td><td>I</td><td>ENVE SELECT</td><td>This port receives the playback envelope signal level to select the video head in special playback mode.</td></tr>
<tr><td>66</td><td>I</td><td>MIC (H)</td><td>This port is high during the mic is connected.</td></tr>
<tr><td>94</td><td>I</td><td>T- PHOTO</td><td>This port receives the signal when take-up photo sensor detects the tape begining.</td></tr>
<tr><td>95</td><td>I</td><td>S-PHOTO</td><td>This port receives the signal when supply photo sensor detects the tape end.</td></tr>
<tr><td>96</td><td>I</td><td>NORMAL/ SERVICE/TEST</td><td>NORMAL/SERVICE/TEST mode selection.
<table>
<tr><th>INPUT VOLTAGE</th><th>MODE</th></tr>
<tr><td>MORE THAN 4.0V</td><td>NORMAL</td></tr>
<tr><td>2.5V~4.0V</td><td>SERVICE</td></tr>
<tr><td>LESS THAN 2.5V</td><td>TEST</td></tr>
</table></td></tr>
<tr><td>97</td><td>I</td><td>SYSTEM SELECT</td><td>System mode selection for auto setup.
<table>
<tr><th>INPUT VOLTAGE</th><th>MODE</th></tr>
<tr><td>MORE THAN 3.0V</td><td>MODE 4</td></tr>
<tr><td>2.0V~3.0V</td><td>MODE 2</td></tr>
<tr><td>LESS THAN 2.0V</td><td>MODE 1</td></tr>
</table></td></tr>
<tr><td>98</td><td>I</td><td>STEREO/BIL</td><td>Audio mode detection for display on the OSD.
<table>
<tr><th>INPUT VOLTAGE</th><th>DISPLAY</th></tr>
<tr><td>MORE THAN 4.2V</td><td>NO DISPLAY</td></tr>
<tr><td>3.0V~4.2V</td><td>MONO 1</td></tr>
<tr><td>2.0V~3.0V</td><td>BILINGUAL</td></tr>
<tr><td>0.8V~2.0V</td><td>MONO 1+2</td></tr>
<tr><td>LESS THAN 0.8V</td><td>STEREO</td></tr>
</table></td></tr>
<tr><td>99</td><td>I</td><td>DEW SNS</td><td>This port is more than 1.36V during detecting the dew formation.</td></tr>
<tr><td>100</td><td>I</td><td>ATIC SEL</td><td>Head amp IC setting for playback envelope detection.
<table>
<tr><th>INPUT VOLTAGE</th><th>IC</th></tr>
<tr><td>MORE THAN 3.0V</td><td>TEA5705</td></tr>
<tr><td>2.0V~3.0V</td><td>AN3336</td></tr>
<tr><td>LESS THAN 2.0V</td><td>AN3360</td></tr>
</table></td></tr>
<tr><td>101</td><td>I</td><td>PIC VR IN</td><td>This port receives the voltage which depends on picture VR setting.</td></tr>
<tr><td>102</td><td>I</td><td>CHROMA IN</td><td>AI PB Chrominance level adjustment input.</td></tr>
</table>

Fig. MP4

<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>103</td><td>I</td><td>SLTR MM</td><td>Slowtracking adjustment input.</td></tr>
<tr><td>104</td><td>I</td><td>AV MODE SEL</td><td>TV/VTR switch setting.
<table>
<tr><td>INPUT VOLTAGE</td><td>SWITCH</td></tr>
<tr><td>MORE THAN 3.0V</td><td>TV/VTR</td></tr>
<tr><td>2.0V~3.0V</td><td>NO SW</td></tr>
<tr><td>LESS THAN 2.0V</td><td>AV LINK</td></tr>
</table></td></tr>
<tr><td>105</td><td>I</td><td>TRACKING ENVE</td><td>Playback envelope input for tracking adjustment.</td></tr>
<tr><td>106</td><td>I/O</td><td>EDIT TRIG</td><td>Trigger signal in/output for synchronized editing.</td></tr>
<tr><td>107</td><td>I/O</td><td>PB/TUN/LINE</td><td>Normal audio switching control.
NORMAL AUDIO PB (INCLUDING INSERT): HIGH
LINE IN EE OR A. DUB MODE : LOW
TUNER IN EE OR A. DUB MODE : Z</td></tr>
<tr><td>108</td><td>O</td><td>T SNS LED (L)</td><td>Sensor LED drive signal output.
● When this port supplies the low signal, the sensor LED is lit.</td></tr>
<tr><td>109</td><td>I/O</td><td>PREROLL</td><td>Preroll signal in/output for synchronized editing.</td></tr>
<tr><td>110</td><td>O</td><td>SYSTEM 2</td><td>Refer to Fig. MP. 7</td></tr>
<tr><td>111</td><td>O</td><td>SYSTEM 1</td><td>Refer to Fig. MP. 7</td></tr>
<tr><td>112</td><td>I/O</td><td>HIFI/MIX/NORM</td><td rowspan="2">Audio output mode control.
<table>
<tr><td></td><td colspan="4">MODE</td></tr>
<tr><td></td><td>STEREO</td><td>L CH</td><td>R CH</td><td>NORMAL</td></tr>
<tr><td>HIFI/MIX/NORM</td><td>H</td><td>H</td><td>H</td><td>L</td></tr>
<tr><td>L CH/R CH/STEREO</td><td>L</td><td>H</td><td>Z</td><td>L</td></tr>
</table>
Z: HIGH IMPEDANCE</td></tr>
<tr><td>113</td><td>O</td><td>L CH/R CH/ STEREO</td></tr>
<tr><td>114</td><td>I</td><td>DIGITAL 5V</td><td>VDD</td></tr>
<tr><td>115</td><td>I</td><td>POSITION SW1</td><td rowspan="3">
<table>
<tr><td>P. SW 3</td><td>P. SW 2</td><td>P. SW 1</td><td>Position (Mode) Name</td></tr>
<tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr>
<tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr>
<tr><td>O</td><td>I</td><td>O</td><td>REV, REV SLOW</td></tr>
<tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING/UNLOADING)</td></tr>
<tr><td>I</td><td>O</td><td>O</td><td>PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1</td></tr>
<tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr>
<tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr>
<tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the capstan motor shaft.</td></tr>
<tr><td>116</td><td>I</td><td>POSITION SW2</td></tr>
<tr><td>117</td><td>I</td><td>POSITION SW3</td></tr>
<tr><td>118</td><td>O</td><td>AVPBL</td><td>AV1 PB (H) output control.
● This port is high when AV1 PB (H) is set to high.
● This port is low when AV1 PB (H) is set to low.</td></tr>
<tr><td>119</td><td>I</td><td>GND</td><td>GND</td></tr>
<tr><td>120</td><td>O</td><td>DEA</td><td rowspan="2">AV2 output control.
<table>
<tr><td>AV2 OUTPUT</td><td>DEA</td><td>DEB</td></tr>
<tr><td>TUNER</td><td>H</td><td>L</td></tr>
<tr><td>AV1</td><td>L</td><td>L</td></tr>
<tr><td>SAT</td><td>L</td><td>H</td></tr>
<tr><td>VCR OUT</td><td>H</td><td>H</td></tr>
</table></td></tr>
<tr><td>121</td><td>O</td><td>DEB</td></tr>
</table>

Fig. MP5

Pin Number	Input/Output	Port Name	Function
122	O	AI MES (H)	This port is high when measuring the head and tape condition to determine the optimum recording current before starting the AI recording.
123	O	POWER OFF (H)	Power on/off control.
124	O	TRICK (L)	This port is low during special playback (CUE, REV, SLOW, STILL) mode.

Fig. MP6

	MODE 1	MODE 2	MODE 3	MODE 4
PIN 111 (SYSTEM 1)	H: MESECAM L : PAL Z : AUTO	H: MESECAM L : PAL	H: PAL L : NTSC Z : AUTO	H: MESECAM L : PAL Z : AUTO
PIN 110 (SYSTEM 2)	H: EXCEPT NTSC L : NTSC-M	H: SECAM L : PAL Z : AUTO	—	H: EXCEPT NTSC L : NTSC-M
PIN 35 (SYSTEM 4)	H: PAL- I L : B/G/D/K	H: SECAM L : PAL	—	H: PAL-I L : B/G/D/K
PIN 36 (SYSTEM 5)	H: PAL L : NTSC	H: PAL L : NTSC	H: 50Hz L : 60Hz	H: PAL L : NTSC

Z: HIGH IMPEDANCE

Fig. MP7

Note: 1. The mode is decided depend on SYSTEM SELECT PORT (PIN 97).

INPUT/OUTPUT CHART FOR IC7503

Pin Number	Input/Output	Port Name	Function
1	O	L CH (L)	FIP level meter Lch (L)
2	I	AFC (S)	AFC S-CURVE
3	O	DEL (L)	AV2 connector detection DECODER: LOW EXT : HIGH
4	O	L CTL	LANK clock control
5	I	JOG1	JOG1
6	O	IC CLK	Tuner IC control clock
7	I	IR	Remote controller data
8	I	L CLK	LANK clock
9	O	FS CS (H)	FS chip select (H)
10	I	JOG2	JOG2
11	O	SAT IR	SAT IR output
12	I	POW FAIL (L)	Power fail detection
13	I	RESET (L)	Reset (L)
14	I	S CLK	Serial clock
15	I	S DATA IN	Serial data input
16	O	S DATA OUT	Serial data input
17	O	T CLK	Timer bus clock output
18	I	T LSN	Timer data input (from OSD)
19	O	T TLK	Timer data output (to OSD)
20	O	128Hz	128Hz
21	I	NC	Not used
22	O	STAND BY (L)	Stand by (L)
23	O	NC	Not used
24	O	FIP (L)	FIP heater on (L)
25 26 27 28 29	I	KEY SCAN	Key scan input
30	O	AUDIO DEF (H)	Audio defeat high output
31	O	R CH (L)	FIP level meter Rch (L)

Fig. MP8

Pin Number	Input/Output	Port Name	Function
32	O	P17	DGT1
33	O	P16	DGT2
34	O	P15	DGT3
35	O	P14	DGT4
36	O	P13	DGT5
37	O	P12	DGT6
38	O	P11	DGT7
39	O	P10	DGT8
40	O	P07	DGT9/Key scan output
41	O	P06	DGT10/Key scan output
42	O	P05	SEG J/Key scan output
43	O	P04	SEG I/Key scan output
44	O	P03	SEG H/Key scan output
45	O	P02	SEG D/Key scan output
46	O	P01	SEG E/Key scan output
47	O	P00	SEG C/Key scan output
48	O	P37	SEG G/Key scan output
49	O	P36	SEG F/Key scan output
50	O	P35	SEG B/Key scan output
51	O	P34	SEG A/Key scan output
52	O	AI ON (H)	AI on (H) output
53	O	OSD ON (H)	OSD on (H) output
54	O	METER OFF (H)	Level meter off (H) output
55	O	MONO (H)	Forced MONO (NICAM off) (H) output
56	—	VEE	−29V
57	—	VCC	+5V
58	O	XOUT	8.39MHz clock output
59	I	XIN	8.39MHz clock input
60	—	VSS	GND
61	I	XCIN	32KHz clock input
62	O	XCOUT	32KHz clock output
63	O	SIMUL (H)/SI (H)	Simul (H) output
64	O	SELECT MUTE (H)	Audio select mute (H) output

Fig. MP9

SYSTEM CHART FOR NICAM DECODER

TV SYSTEM SELECT

IC7305		TV SYSTEM	SOUND MODULATION
SW1	SW2		
L	L	B/G	FM-MONO/NICAM GERMAN MULTIPLEX
H	L	I	FM-MONO/NICAM
*	H	M	FM-MONO

*: DO NOT CARE

FM-MONO MODE SELECT

IC7305	FM-MONO MODE	FM-MONO SOURCE
SW3		
L	INT	SIF (IF INPUT1, IF INPUT2)
H	EXT	AUDIO MULTI (MONO IN)

SIF INPUT SELECT

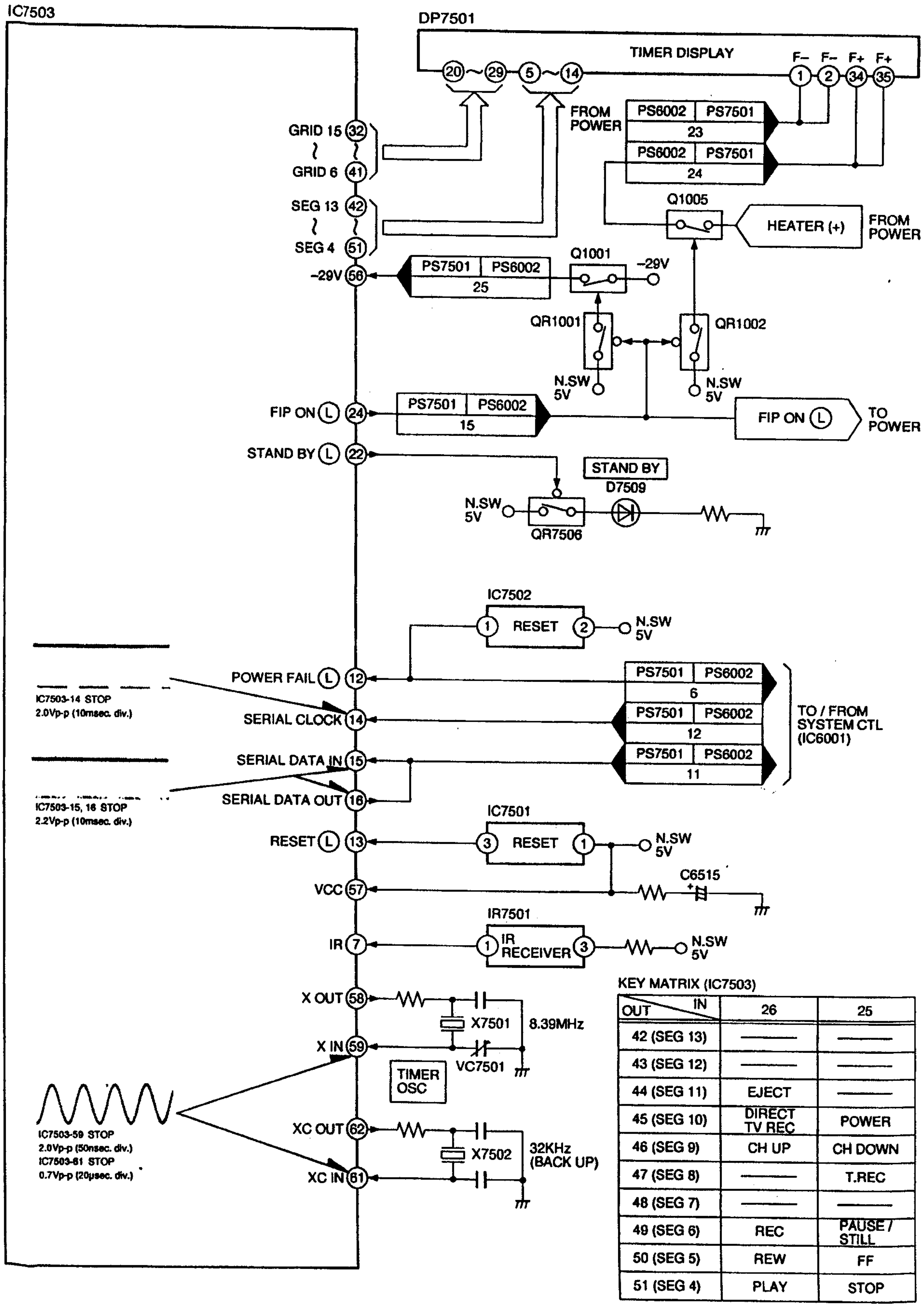
IC7305	SIF INPUT
SW4	
L	IF INPUT 1
H	IF INPUT 2

AUDIO OUTPUT SELECT

INPUT TV SYSTEM	SOUND MODULATION	FM-MONO MODE	MAIN OUTPUT		SUB OUTPUT	
			INPUT SOURCE	MATRIX	INPUT SOURCE	MATRIX
B/G	MONO	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
	NICAM STEREO	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM M1/DATA	INT	IF INPUT 1/2 (NICAM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	MONAURAL	MONO IN	MONAURAL
	NICAM M1/M2	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM DATA	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
	STEREO	INT	IF INPUT 1/2 (FM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
	BILINGUAL	INT	IF INPUT 1/2 (FM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
I	MONO	INT	IF INPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
	NICAM STEREO	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM M1/DATA	INT	IF INPUT 1/2 (NICAM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	MONAURAL	MONO IN	MONAURAL
	NICAM M1/M2	INT	IF INPUT 1/2 (NICAM)	STEREO	IF INPUT 1/2 (FM)	MONAURAL
		EXT	IF INPUT 1/2 (NICAM)	STEREO	MONO IN	MONAURAL
	NICAM DATA	INT	IF IMPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL
		EXT	MONO IN	MONAURAL	MONO IN	MONAURAL
M	MONO	INT	IFINPUT 1/2 (FM)	MONAURAL	IF INPUT 1/2 (FM)	MONAURAL

Note: When the IC7305-15 (F MONO) is high, both the MAIN OUTPUT and the SUB OUTPUT apply the FM-MONO audio.

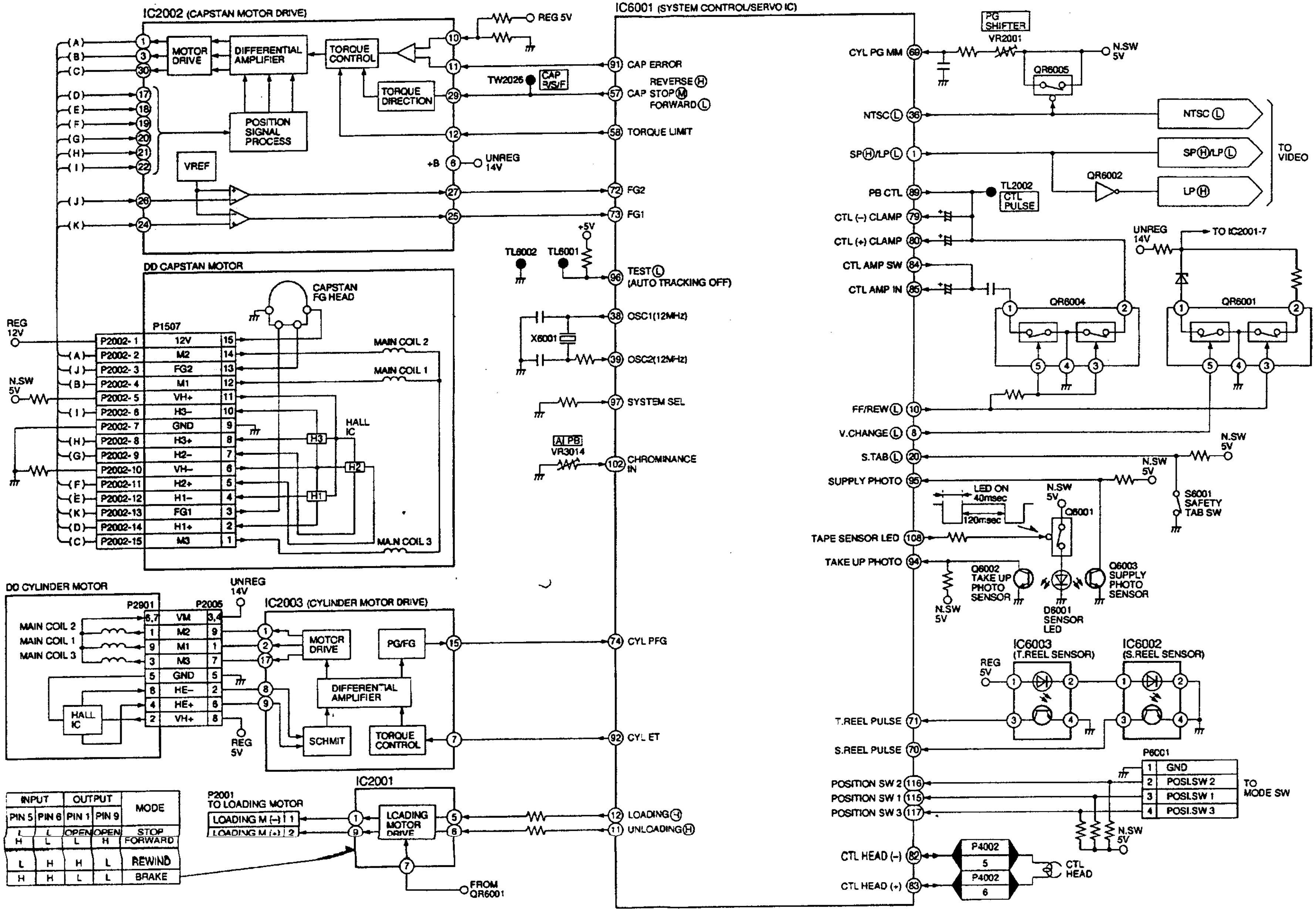
3-2. TIMER BLOCK DIAGRAM


IC7503
DP7501
TIMER DISPLAY
F– F– F+ F+
(1) (2) (34) (35)
(20)~(29) (5)~(14)
FROM POWER
PS6002 PS7501 23
PS6002 PS7501 24
GRID 15 (32)
GRID 6 (41)
SEG 13 (42)
SEG 4 (51)
–29V (56)
PS7501 PS6002 25
Q1001
–29V
Q1005
HEATER (+)
FROM POWER
QR1001
QR1002
N.SW 5V
N.SW 5V
FIP ON Ⓛ (24)
PS7501 PS6002 15
FIP ON Ⓛ
TO POWER
STAND BY Ⓛ (22)
STAND BY
D7509
N.SW 5V
QR7506
IC7502
(1) RESET (2)
N.SW 5V
POWER FAIL Ⓛ (12)
IC7503-14 STOP
2.0Vp-p (10msec. div.)
SERIAL CLOCK (14)
SERIAL DATA IN (15)
SERIAL DATA OUT (16)
IC7503-15, 16 STOP
2.2Vp-p (10msec. div.)
PS7501 PS6002 6
PS7501 PS6002 12
PS7501 PS6002 11
TO / FROM SYSTEM CTL (IC6001)
IC7501
RESET Ⓛ (13)
(3) RESET (1)
N.SW 5V
VCC (57)
C6515
IR7501
IR (7)
(1) IR RECEIVER (3)
N.SW 5V
X OUT (58)
X7501
8.39MHz
X IN (59)
VC7501
TIMER OSC
XC OUT (62)
X7502
32KHz (BACK UP)
XC IN (61)
IC7503-59 STOP
2.0Vp-p (50nsec. div.)
IC7503-61 STOP
0.7Vp-p (20μsec. div.)

KEY MATRIX (IC7503)

OUT \ IN	26	25
42 (SEG 13)	———	———
43 (SEG 12)	———	———
44 (SEG 11)	EJECT	———
45 (SEG 10)	DIRECT TV REC	POWER
46 (SEG 9)	CH UP	CH DOWN
47 (SEG 8)	———	T.REC
48 (SEG 7)	———	———
49 (SEG 6)	REC	PAUSE / STILL
50 (SEG 5)	REW	FF
51 (SEG 4)	PLAY	STOP

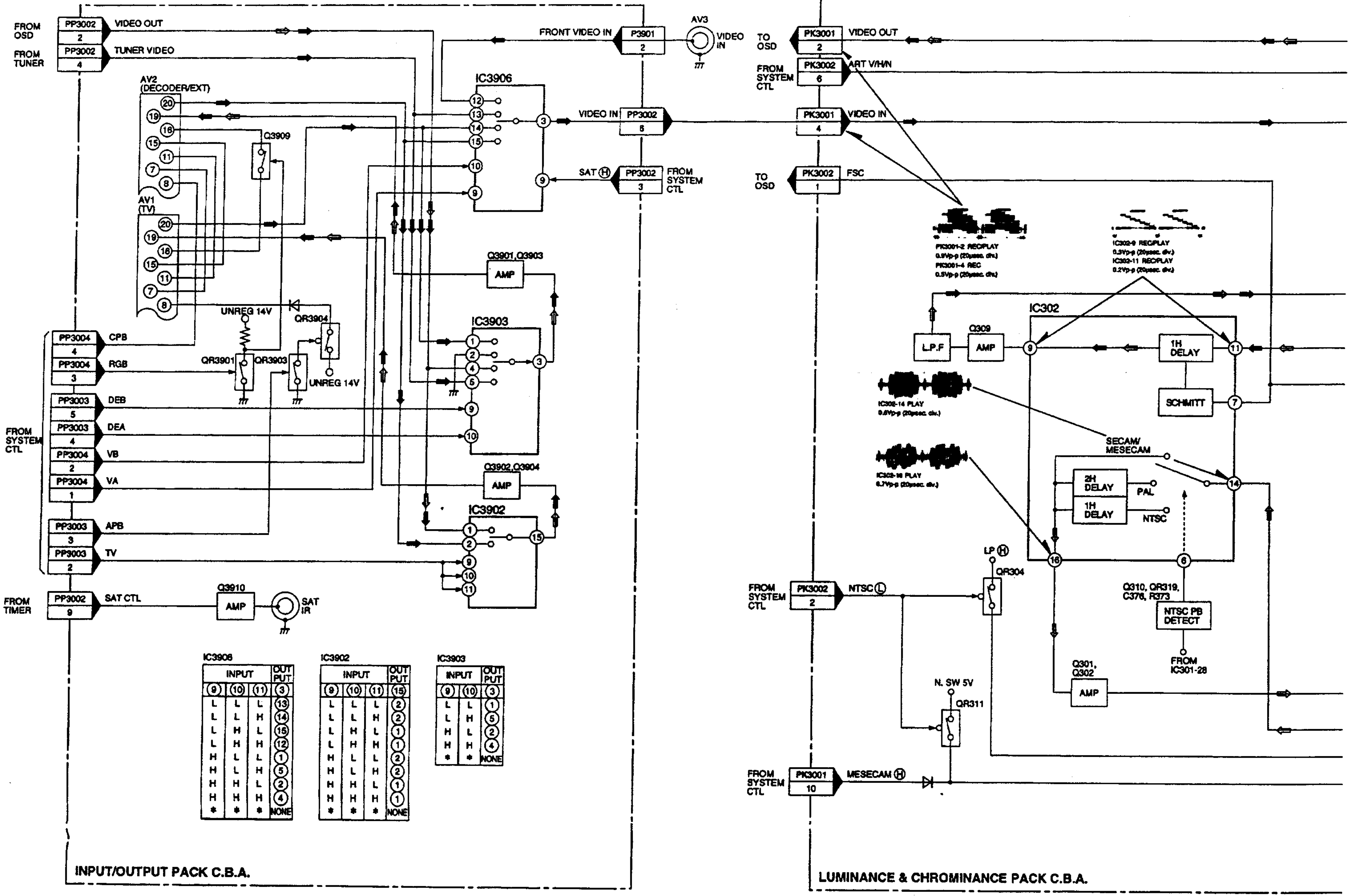
3-3. SYSTEM CONTROL & SERVO BLOCK DIAGRAM


IC2002 (CAPSTAN MOTOR DRIVE)
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
TORQUE CONTROL
TORQUE DIRECTION
POSITION SIGNAL PROCESS
VREF
REG 5V
+B
UNREG 14V
(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K)
DD CAPSTAN MOTOR
CAPSTAN FG HEAD
P1507
REG 12V
N.SW 5V
P2002- 1 | 12V | 15
P2002- 2 | M2 | 14
P2002- 3 | FG2 | 13
P2002- 4 | M1 | 12
P2002- 5 | VH+ | 11
P2002- 6 | H3– | 10
P2002- 7 | GND | 9
P2002- 8 | H3+ | 8
P2002- 9 | H2– | 7
P2002-10 | VH– | 6
P2002-11 | H2+ | 5
P2002-12 | H1– | 4
P2002-13 | FG1 | 3
P2002-14 | H1+ | 2
P2002-15 | M3 | 1
MAIN COIL 2
MAIN COIL 1
MAIN COIL 3
HALL IC
H1 H2 H3
TW2026
CAP R/S/F
TL6002
TL6001
+5V
X6001
AI PB
VR3014
DD CYLINDER MOTOR
P2901
P2005
UNREG 14V
VM | 6,7 | 3,4
M2 | 1 | 9
M1 | 9 | 1
M3 | 3 | 7
GND | 5 | 5
HE– | 6 | 2
HE+ | 4 | 6
VH+ | 2 | 8
HALL IC
IC2003 (CYLINDER MOTOR DRIVE)
MOTOR DRIVE
PG/FG
DIFFERENTIAL AMPLIFIER
SCHMIT
TORQUE CONTROL
REG 5V
IC2001
LOADING MOTOR DRIVE
P2001 TO LOADING MOTOR
LOADING M (–) 1
LOADING M (+) 2
FROM QR6001
IC6001 (SYSTEM CONTROL/SERVO IC)
91 CAP ERROR
57 CAP STOP Ⓜ REVERSE Ⓗ FORWARD Ⓛ
58 TORQUE LIMIT
72 FG2
73 FG1
96 TEST Ⓛ (AUTO TRACKING OFF)
38 OSC1(12MHz)
39 OSC2(12MHz)
97 SYSTEM SEL
102 CHROMINANCE IN
74 CYL PFG
92 CYL ET
12 LOADING Ⓗ
11 UNLOADING Ⓗ
CYL PG MM 69
NTSC Ⓛ 36
SP Ⓗ/LP Ⓛ 1
PB CTL 89
CTL (–) CLAMP 79
CTL (+) CLAMP 80
CTL AMP SW 84
CTL AMP IN 85
FF/REW Ⓛ 10
V.CHANGE Ⓛ 8
S.TAB Ⓛ 20
SUPPLY PHOTO 95
TAPE SENSOR LED 108
TAKE UP PHOTO 94
T.REEL PULSE 71
S.REEL PULSE 70
POSITION SW 2 116
POSITION SW 1 115
POSITION SW 3 117
CTL HEAD (–) 82
CTL HEAD (+) 83
PG SHIFTER
VR2001
QR6005
N.SW 5V
NTSC Ⓛ
SP Ⓗ/LP Ⓛ
LP Ⓗ
TO VIDEO
QR6002
TL2002
CTL PULSE
UNREG 14V
TO IC2001-7
QR6004
QR6001
S6001 SAFETY TAB SW
LED ON 40msec
120msec
Q6001
Q6002 TAKE UP PHOTO SENSOR
D6001 SENSOR LED
Q6003 SUPPLY PHOTO SENSOR
IC6003 (T.REEL SENSOR)
IC6002 (S.REEL SENSOR)
REG 5V
P6001
1 GND
2 POSI.SW 2
3 POSI.SW 1
4 POSI.SW 3
TO MODE SW
P4002 5
P4002 6
CTL HEAD

INPUT		OUTPUT		MODE
PIN 5	PIN 6	PIN 1	PIN 9	
L	L	OPEN	OPEN	STOP
H	L	L	H	FORWARD
L	H	H	L	REWIND
H	H	L	L	BRAKE

3-4 LUMINANCE & CHROMINANCE BLOCK DIAGRAM

MAIN SIGNAL PATH IN REC MODE *MAIN SIGNAL PATH IN PLAYBACK MODE*


FROM OSD
PP3002 2
VIDEO OUT
FROM TUNER
PP3002 4
TUNER VIDEO
AV2 (DECODER/EXT)
20
19
16
15
11
7
8
Q3909
AV1 (TV)
IC3906
12
13
14
15
10
9
3
FRONT VIDEO IN
P3901 2
AV3
VIDEO IN
VIDEO IN
PP3002 5
SAT Ⓗ
PP3002 3
FROM SYSTEM CTL
Q3901, Q3903
AMP
IC3903
UNREG 14V
QR3904
QR3901
QR3903
UNREG 14V
PP3004 4
CPB
PP3004 3
RGB
PP3003 5
DEB
PP3003 4
DEA
PP3004 2
VB
PP3004 1
VA
FROM SYSTEM CTL
PP3003 3
APB
PP3003 2
TV
Q3902, Q3904
AMP
IC3902
FROM TIMER
PP3002 9
SAT CTL
Q3910
AMP
SAT IR
INPUT/OUTPUT PACK C.B.A.
TO OSD
PK3001 2
VIDEO OUT
FROM SYSTEM CTL
PK3002 6
ART V/H/N
PK3001 4
VIDEO IN
TO OSD
PK3002 1
FSC
PK3001-2 REC/PLAY
0.9Vp-p (20μsec. div.)
PK3001-4 REC
0.5Vp-p (20μsec. div.)
IC302-9 REC/PLAY
0.3Vp-p (20μsec. div.)
IC302-11 REC/PLAY
0.2Vp-p (20μsec. div.)
IC302
L.P.F
Q309
AMP
9
1H DELAY
11
SCHMITT
7
IC302-14 PLAY
0.6Vp-p (20μsec. div.)
SECAM/MESECAM
IC302-16 PLAY
0.7Vp-p (20μsec. div.)
2H DELAY
PAL
1H DELAY
NTSC
14
16
6
LP Ⓗ
QR304
FROM SYSTEM CTL
PK3002 2
NTSC Ⓛ
Q310, QR319, C376, R373
NTSC PB DETECT
FROM IC301-28
N. SW 5V
QR311
Q301, Q302
AMP
FROM SYSTEM CTL
PK3001 10
MESECAM Ⓗ
LUMINANCE & CHROMINANCE PACK C.B.A.

IC3906

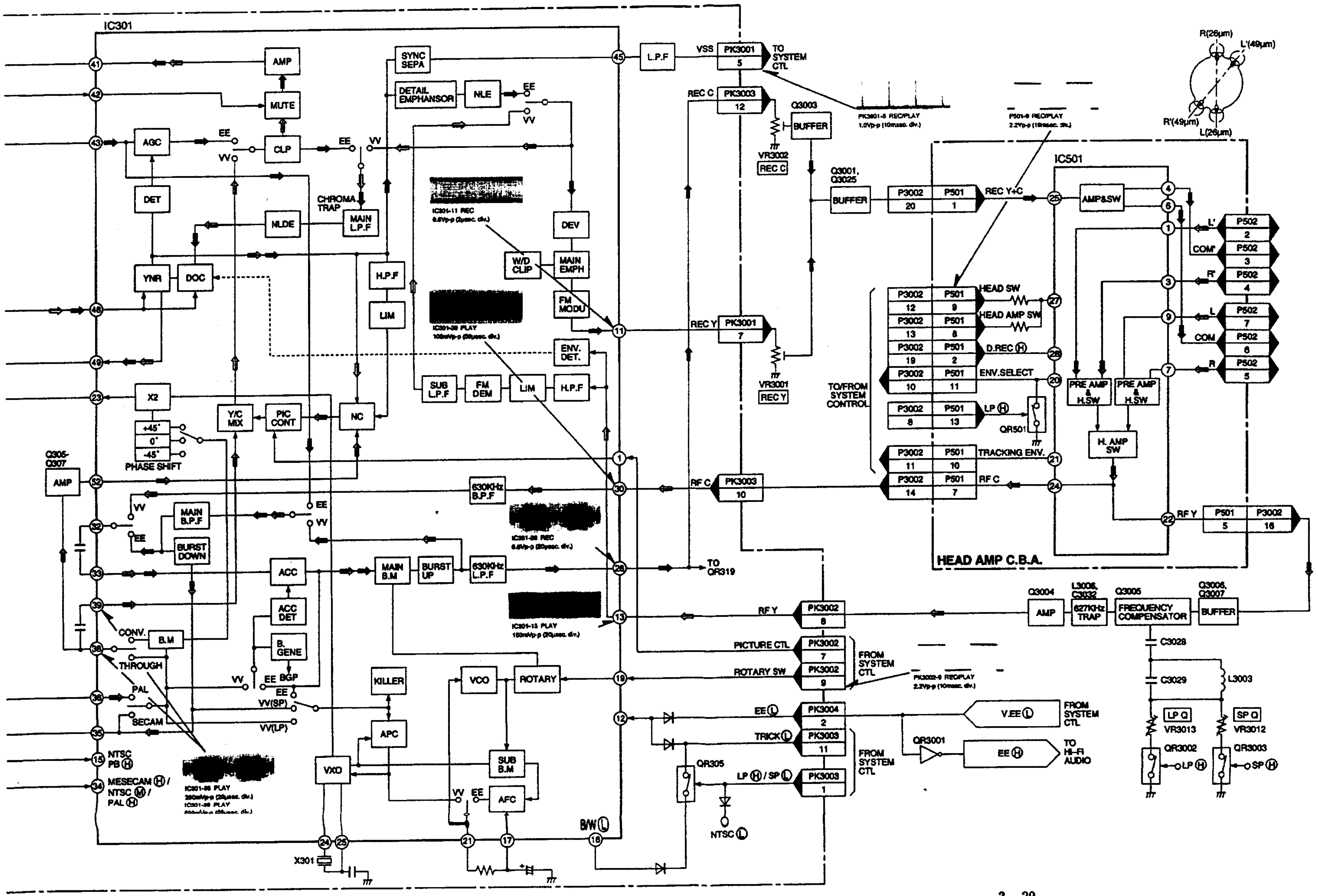
INPUT			OUT PUT
⑨	⑩	⑪	③
L	L	L	⑬
L	L	H	⑭
L	H	L	⑮
L	H	H	⑫
H	L	L	①
H	L	H	⑤
H	H	L	②
H	H	H	④
*	*	*	NONE

IC3902

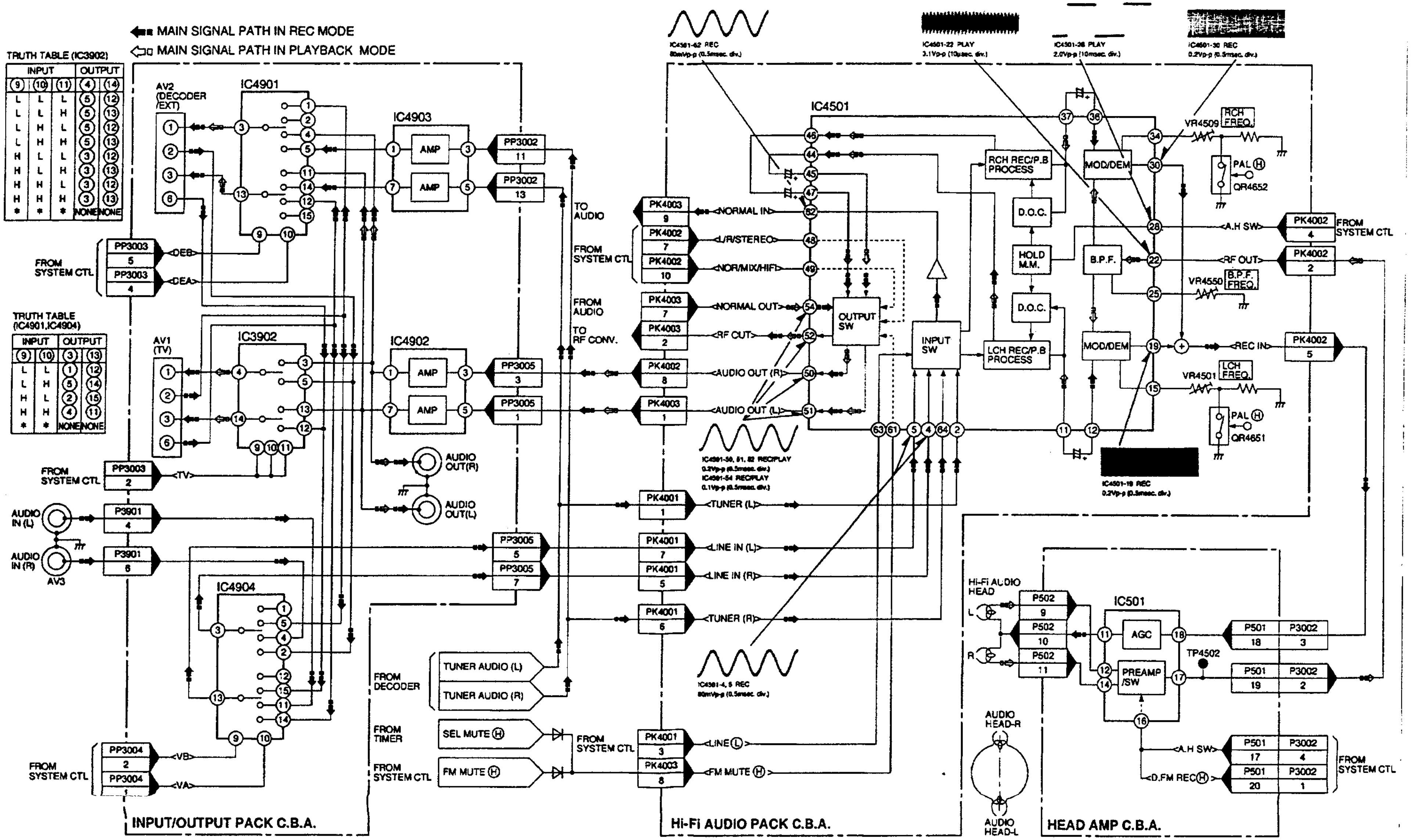
INPUT			OUT PUT
⑨	⑩	⑪	⑮
L	L	L	②
L	L	H	②
L	H	L	①
L	H	H	①
H	L	L	②
H	L	H	②
H	H	L	①
H	H	H	①
*	*	*	NONE

IC3903

INPUT		OUT PUT
⑨	⑩	③
L	L	①
L	H	⑤
H	L	②
H	H	④
*	*	NONE


IC301
AMP
MUTE
AGC
CLP
DET
YNR
DOC
NLDE
MAIN L.P.F
CHROMA TRAP
SYNC SEPA
DETAIL EMPHANSOR
NLE
EE
VV
DEV
MAIN EMPH
W/D CLIP
FM MODU
ENV. DET.
H.P.F
LIM
SUB L.P.F
FM DEM
X2
+45°
0°
-45°
PHASE SHIFT
Y/C MIX
PIC CONT
NC
Q305-Q307
AMP
630KHz B.P.F
MAIN B.P.F
BURST DOWN
ACC
ACC DET
B. GENE
BGP
MAIN B.M
BURST UP
630KHz L.P.F
B.M
CONV.
THROUGH
PAL
SECAM
NTSC PB Ⓗ
MESECAM Ⓗ / NTSC Ⓜ / PAL Ⓗ
VV(SP)
VV(LP)
KILLER
APC
VCO
ROTARY
SUB B.M
VXO
AFC
X301
B/W Ⓛ
IC301-11 REC 0.6Vp-p (2μsec. div.)
IC301-30 PLAY 100mVp-p (50μsec. div.)
IC301-26 REC 0.6Vp-p (20μsec. div.)
IC301-13 PLAY 150mVp-p (20μsec. div.)
IC301-36 PLAY 280mVp-p (20μsec. div.)
IC301-39 PLAY
L.P.F
VSS
PK3001 5
TO SYSTEM CTL
REC C
PK3003 12
VR3002
REC C
Q3003
BUFFER
REC Y
PK3001 7
VR3001
REC Y
RF C
PK3003 10
TO QR319
RF Y
PK3002 8
PICTURE CTL
PK3002 7
ROTARY SW
PK3002 9
FROM SYSTEM CTL
EE Ⓛ
PK3004 2
TRICK Ⓛ
PK3003 11
LP Ⓗ / SP Ⓛ
PK3003 1
QR305
NTSC Ⓛ
QR3001
V.EE Ⓛ
FROM SYSTEM CTL
EE Ⓗ
TO HI-FI AUDIO
PK3001-5 REC/PLAY 1.0Vp-p (10msec. div.)
P501-8 REC/PLAY 2.2Vp-p (10msec. div.)
PK3002-9 REC/PLAY 2.2Vp-p (10msec. div.)
Q3001, Q3025
BUFFER
P3002 20
P501 1
REC Y+C
IC501
AMP&SW
HEAD SW
HEAD AMP SW
D.REC Ⓗ
ENV.SELECT
LP Ⓗ
QR501
TRACKING ENV.
RF C
RF Y
TO/FROM SYSTEM CONTROL
P3002 12 / P501 9
P3002 13 / P501 8
P3002 19 / P501 2
P3002 10 / P501 11
P3002 8 / P501 13
P3002 11 / P501 10
P3002 14 / P501 7
P501 5 / P3002 16
PRE AMP & H.SW
H. AMP SW
P502 2
P502 3
P502 4
P502 7
P502 6
P502 5
L'
COM'
R'
L
COM
R
HEAD AMP C.B.A.
R(26μm)
L'(49μm)
R'(49μm)
L(26μm)
Q3004
AMP
L3006, C3032
627KHz TRAP
Q3005
FREQUENCY COMPENSATOR
Q3006, Q3007
BUFFER
C3028
C3029
L3003
LP Q
SP Q
VR3013
VR3012
QR3002
QR3003
LP Ⓗ
SP Ⓗ

3-5. HI-FI AUDIO BLOCK DIAGRAM


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
AV2 (DECODER /EXT)
IC4901
IC4903
AMP
PP3002 11
PP3002 13
TO AUDIO
FROM SYSTEM CTL
PP3003 5
PP3003 4
<DEB>
<DEA>
AV1 (TV)
IC3902
IC4902
PP3005 3
PP3005 1
FROM AUDIO
TO RF CONV.
PP3003 2
<TV>
AUDIO OUT(R)
AUDIO OUT(L)
AUDIO IN (L)
AUDIO IN (R)
AV3
P3901 4
P3901 6
PP3005 5
PP3005 7
IC4904
PP3004 2
PP3004 1
<VB>
<VA>
FROM DECODER
TUNER AUDIO (L)
TUNER AUDIO (R)
FROM TIMER
SEL MUTE Ⓗ
FROM SYSTEM CTL
FM MUTE Ⓗ
INPUT/OUTPUT PACK C.B.A.
IC4501-62 REC
80mVp-p (0.5msec. div.)
IC4501-22 PLAY
3.1Vp-p (10μsec. div.)
IC4501-26 PLAY
2.0Vp-p (10msec. div.)
IC4501-30 REC
0.2Vp-p (0.5msec. div.)
IC4501
PK4003 9
<NORMAL IN>
PK4002 7
<L/R/STEREO>
PK4002 10
<NOR/MIX/HIFI>
PK4003 7
<NORMAL OUT>
PK4003 2
<RF OUT>
PK4002 8
<AUDIO OUT (R)>
PK4003 1
<AUDIO OUT (L)>
OUTPUT SW
INPUT SW
RCH REC/P.B PROCESS
LCH REC/P.B PROCESS
D.O.C.
HOLD M.M.
MOD/DEM
B.P.F.
VR4509
RCH FREQ.
PAL Ⓗ
QR4652
VR4550
B.P.F. FREQ.
VR4501
LCH FREQ.
QR4651
<A.H SW>
PK4002 4
<RF OUT>
PK4002 2
<REC IN>
PK4002 5
FROM SYSTEM CTL
IC4501-50, 51, 52 REC/PLAY
0.2Vp-p (0.5msec. div.)
IC4501-54 REC/PLAY
0.1Vp-p (0.5msec. div.)
IC4501-19 REC
0.2Vp-p (0.5msec. div.)
PK4001 1
<TUNER (L)>
PK4001 7
<LINE IN (L)>
PK4001 5
<LINE IN (R)>
PK4001 6
<TUNER (R)>
IC4501-4, 5 REC
80mVp-p (0.5msec. div.)
PK4001 3
<LINE Ⓛ>
PK4003 8
<FM MUTE Ⓗ>
Hi-Fi AUDIO PACK C.B.A.
Hi-Fi AUDIO HEAD
L
R
P502 9
P502 10
P502 11
IC501
AGC
PREAMP /SW
TP4502
P501 18
P3002 3
P501 19
P3002 2
AUDIO HEAD-R
AUDIO HEAD-L
<A.H SW>
<D.FM REC Ⓗ>
P501 17
P3002 4
P501 20
P3002 1
FROM SYSTEM CTL
HEAD AMP C.B.A.

TRUTH TABLE (IC3902)

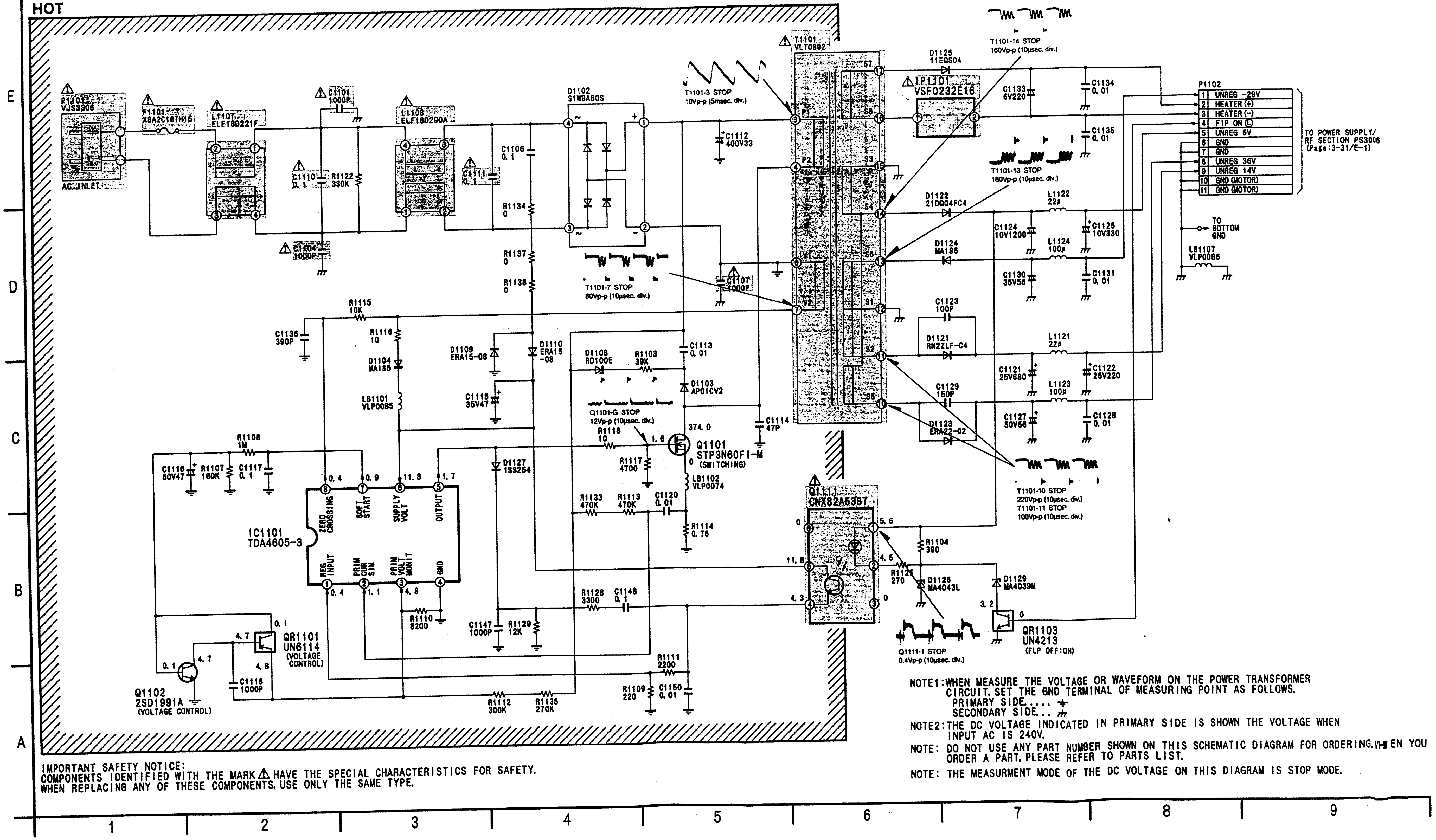
INPUT			OUTPUT	
⑨	⑩	⑪	④	⑭
L	L	L	⑤	⑫
L	L	H	⑤	⑬
L	H	L	⑤	⑫
L	H	H	⑤	⑬
H	L	L	③	⑫
H	L	H	③	⑬
H	H	L	③	⑫
H	H	H	③	⑬
*	*	*	NONE	NONE

TRUTH TABLE (IC4901,IC4904)

INPUT		OUTPUT	
⑨	⑩	③	⑬
L	L	①	⑫
L	H	⑤	⑭
H	L	②	⑮
H	H	④	⑪
*	*	NONE	NONE

3-6. POWER SCHEMATIC DIAGRAM

CAUTION THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.


HOT
E
D
C
B
A
1
2
3
4
5
6
7
8
9
P1101 VJS3306
AC INLET
F1101 XBA2C18TH15
L1107 ELF18D221F
C1101 1000P
C1110 0.1
R1122 330K
C1104 1000P
L1108 ELF18D290A
C1111
C1106 0.1
R1134 0
R1137 0
R1138 0
D1102 S1WBA60S
C1112 400V33
C1107 1000P
T1101-3 STOP 10Vp-p (5msec. div.)
T1101-7 STOP 80Vp-p (10μsec. div.)
T1101 VLT0692
P1 P2 V1 V2
S7 S8 S3 S4 S6 S1 S2 S5
D1125 11EQS04
IP1101 VSF0232E16
T1101-14 STOP 160Vp-p (10μsec. div.)
C1133 6V220
C1134 0.01
C1135 0.01
T1101-13 STOP 180Vp-p (10μsec. div.)
D1122 21DQ04FC4
L1122 22μ
C1124 10V1200
C1125 10V330
L1124 100μ
D1124 MA185
C1130 35V56
C1131 0.01
C1123 100P
D1121 RN2ZLF-C4
L1121 22μ
C1121 25V680
C1122 25V220
L1123 100μ
C1129 150P
D1123 ERA22-02
C1127 50V56
C1128 0.01
T1101-10 STOP 220Vp-p (10μsec. div.)
T1101-11 STOP 100Vp-p (10μsec. div.)
P1102
1 UNREG -29V
2 HEATER (+)
3 HEATER (-)
4 FIP ON Ⓛ
5 UNREG 6V
6 GND
7 GND
8 UNREG 36V
9 UNREG 14V
10 GND (MOTOR)
11 GND (MOTOR)
TO POWER SUPPLY/ RF SECTION PS3006 (Page:3-31/E-1)
TO BOTTOM GND
LB1107 VLP0085
R1115 10K
C1136 390P
R1116 10
D1104 MA185
LB1101 VLP0085
D1109 ERA15-08
D1110 ERA15 -08
C1115 35V47
D1108 RD100E
R1103 39K
C1113 0.01
D1103 AP01CV2
Q1101-G STOP 12Vp-p (10μsec. div.)
R1118 10
374.0
1.6
Q1101 STP3N60FI-M (SWITCHING)
C1114 47P
R1117 4700
LB1102 VLP0074
R1114 0.75
D1127 1SS254
R1133 470K
R1113 470K
C1120 0.01
R1108 1M
C1116 50V47
R1107 180K
C1117 0.1
IC1101 TDA4605-3
ZERO CROSSING
SOFT START
SUPPLY VOLT
OUTPUT
REG. INPUT
PRIM CUR SIM
PRIM VOLT MONIT
GND
0.4
0.9
11.8
1.7
0.4
1.1
4.8
R1110 8200
C1147 1000P
R1129 12K
R1128 3300
C1148 0.1
QR1101 UN6114 (VOLTAGE CONTROL)
0.1
4.7
4.8
Q1102 2SD1991A (VOLTAGE CONTROL)
C1118 1000P
R1112 300K
R1135 270K
R1111 2200
R1109 220
C1150 0.01
Q1111 CNX82A5387
5.6
4.5
11.8
4.3
0
R1104 390
R1125 270
D1126 MA4043L
D1129 MA4039M
3.2
QR1103 UN4213 (FLP OFF:ON)
Q1111-1 STOP 0.4Vp-p (10μsec. div.)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

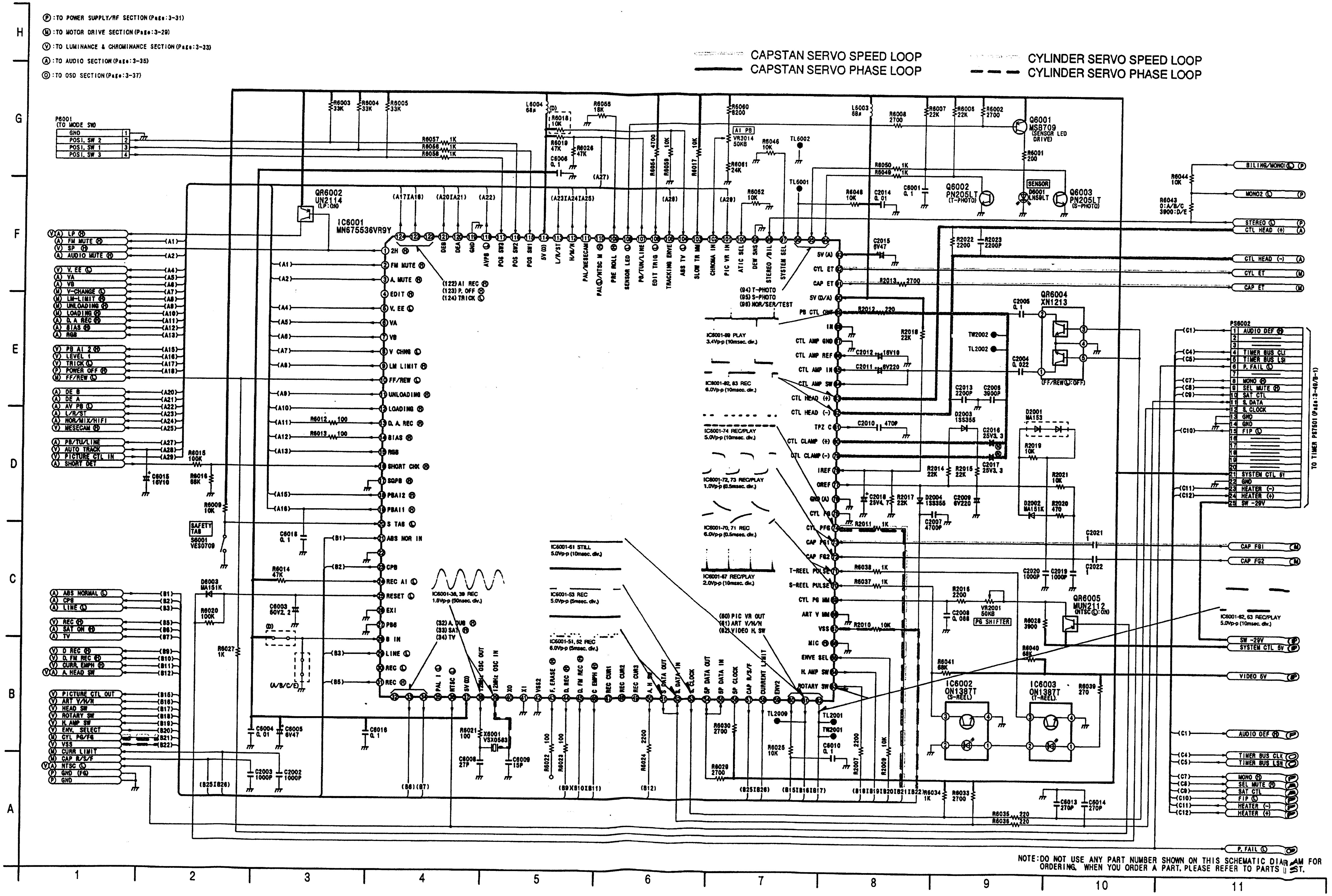
NOTE1: WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚

NOTE2: THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

3-7 SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM



Ⓟ:TO POWER SUPPLY/RF SECTION(Page:3-31)
Ⓜ:TO MOTOR DRIVE SECTION(Page:3-29)
Ⓥ:TO LUMINANCE & CHROMINANCE SECTION(Page:3-33)
Ⓐ:TO AUDIO SECTION(Page:3-35)
Ⓞ:TO OSD SECTION(Page:3-37)

CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP

H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
P6001 (TO MODE SW)
GND
POSI. SW 2
POSI. SW 1
POSI. SW 3
IC6001 MN675536VR9Y
QR6002 UN2114 (LP:ON)
Q6001 MSB709 (SENSOR LED DRIVE)
Q6002 PN205LT (T-PHOTO)
Q6003 PN205LT (S-PHOTO)
SENSOR D6001 LN58LT
QR6004 XN1213
QR6005 MUN2112
IC6002 ON1387T (S-REEL)
IC6003 ON1387T (T-REEL)
VR3014 50KB
VR2001 50KB PG SHIFTER
X6001 VSX0583
SAFETY TAB S6001 VES0709
D6003 MA151K
D2001 MA153
D2002 MA151K
D2003 1SS355
D2004 1SS355
2H
FM MUTE
A. MUTE
EDIT
V. EE
VA
VB
V CHNG
LM LIMIT
FF/REW
UNLOADING
LOADING
D. A. REC
BIAS
RGB
SHORT CHK
SQPB
PBAI2
PBAI1
S TAB
ABS NOR IN
CPB
REC AI
RESET
EXI
PBG
B IN
LINE
REC
5V (A)
CYL ET
CAP ET
5V (D/A)
PB CTL
CTL AMP GND
CTL AMP REF
CTL AMP IN
CTL AMP SW
CTL HEAD (+)
CTL HEAD (-)
TPZ C
CTL CLAMP (+)
CTL CLAMP (-)
IREF
OREF
GND (A)
CYL FG
CYL PFG
CAP FG1
CAP FG2
T-REEL PULSE
S-REEL PULSE
CYL PG MM
ART V MM
VSS
MIC
ENVE SEL
H. AMP SW
ROTARY SW
IC6001-69 PLAY 3.4Vp-p (10msec. div.)
IC6001-82, 83 REC 6.0Vp-p (10msec. div.)
IC6001-74 REC/PLAY 5.0Vp-p (10msec. div.)
IC6001-72, 73 REC/PLAY 1.0Vp-p (0.5msec. div.)
IC6001-70, 71 REC 6.0Vp-p (0.5msec. div.)
IC6001-67 REC/PLAY 2.0Vp-p (10msec. div.)
IC6001-61 STILL 5.0Vp-p (10msec. div.)
IC6001-53 REC 5.0Vp-p (5msec. div.)
IC6001-51, 52 REC 6.0Vp-p (5msec. div.)
IC6001-38, 39 REC 1.6Vp-p (50nsec. div.)
IC6001-82, 83 REC/PLAY 5.0Vp-p (10msec. div.)
(94) T-PHOTO
(95) S-PHOTO
(96) NOR/SER/TEST
(122) AI REC
(123) P. OFF
(124) TRICK
(32) A. DUB
(33) SAT
(34) TV
(60) PIC VR OUT
(61) ART V/H/N
(62) VIDEO H. SW
LP
FM MUTE
SP
AUDIO MUTE
V. EE
VA
VB
V-CHANGE
LM-LIMIT
UNLOADING
LOADING
D. A. REC
BIAS
RGB
PB AI 2
LEVEL 1
TRICK
POWER OFF
FF/REW
DE B
DE A
AV PB
L/R/ST
NOR/MIX/HIFI
MESECAM
PB/TU/LINE
AUTO TRACK
PICTURE CTL IN
SHORT DET
ABS NORMAL
CPB
LINE
REC
SAT ON
TV
D REC
D. FM REC
CURR. EMPH
A. HEAD SW
PICTURE CTL OUT
ART V/H/N
HEAD SW
ROTARY SW
H. AMP SW
ENV. SELECT
CYL PG/FG
VSS
CURR LIMIT
CAP R/S/F
NTSC
GND (FG)
GND
BILING/MONO1
MONO2
STEREO
CTL HEAD (+)
CTL HEAD (-)
CYL ET
CAP ET
PS6002
AUDIO DEF
TIMER BUS CLK
TIMER BUS LSI
P. FAIL
MONO
SEL MUTE
SAT CTL
S. DATA
S. CLOCK
GND
FIP
SYSTEM CTL 5V
HEATER (-)
HEATER (+)
SW -29V
TO TIMER PST601 (Page:3-49/B-1)
CAP FG1
CAP FG2
SW -29V
SYSTEM CTL 5V
VIDEO 5V
AUDIO DEF
TIMER BUS CLK
TIMER BUS LSI
MONO
SEL MUTE
SAT CTL
FIP
HEATER (-)
HEATER (+)
P. FAIL
(FF/REW:OFF)
(NTSC:ON)
(A/B/C/E)
R6044 10K
R6043 0:A/B/C 3900:D/E

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.8	0	0	0	0.1	4.9	0	4.8	0	4.8	0	0	0	0	4.8	0	0	0	0	0
PLAY	4.8	0	0	0	4.8	4.9	0	4.8	0	4.8	0	0	0	0	4.8	0	0	0	0	0
REC	4.8	0	0	0	0.1	4.9	0	4.8	0	4.8	0	0	4.8	4.8	4.8	4.4	0	0	0	0
F.F	4.8	0	0	0	0.1	4.9	0	0	0	0	0	0	0	0	4.8	0	0	0	0	0
REW	4.8	0	0	0	0.1	4.9	0	0	0	0	0	0	0	0	4.8	0	0	0	0	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	–0.1	0	0	4.8	4.9	0	0	0	0	4.9	0.1	0	0	4.9	4.9	4.8	4.9	2.6	2.6	4.5
PLAY	0.2	0	0	4.8	4.8	0	0	0	0	4.8	0.1	0	0	4.9	4.9	4.8	4.9	2.6	2.6	4.5
REC	0	0	0	4.8	4.8	0	0	0	0	0	4.8	0	0	4.9	4.9	4.8	4.9	2.6	2.6	4.5
F.F	–0.1	0	0	4.8	4.9	0	0	0	0	4.8	0.1	0	0	4.9	4.9	4.8	4.9	2.6	2.6	4.5
REW	–0.1	0	0	4.8	4.9	0	0	0	0	4.8	0.1	0	0	4.9	4.9	4.9	4.9	2.6	2.6	4.5

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	4.9	4.9	0	0	4.6	4.6	4.4	4.8	4.8	4.8	2.0	0	4.9	2.5
PLAY	0	0	0	0	0	0	4.9	4.9	0	2.3	4.6	4.6	4.4	4.8	4.8	4.8	0	4.8	4.9	2.5
REC	0	0	4.8	4.8	4.8	0	4.9	4.9	0	0	4.6	4.6	4.4	4.8	4.8	4.8	0	4.8	4.9	2.5
F.F	0	0	0	0	0	0	4.9	4.9	0	0	4.6	4.6	4.4	4.8	4.8	4.8	0	4.8	4.9	2.5
REW	0	0	0	0	0	0	4.9	4.9	0	0	4.6	4.6	4.4	4.8	4.8	4.8	4.9	4.8	4.9	2.5

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	0	0	0	0	0	2.4	0	4.9	0	0	2.4	2.4	4.9	0	0	2.4	2.4	2.3	2.5
PLAY	0	2.4	2.4	0	2.0	0	2.4	0	3.0	5.0	4.6	2.4	2.4	1.0	0	0	2.4	2.4	2.5	2.5
REC	0	2.4	2.4	0	4.8	0	2.4	0	3.0	5.0	4.6	2.4	2.4	1.1	0	0	2.4	2.4	2.3	2.5
F.F	0	2.4	0	0	2.8	0	2.4	0	3.0	2.2	2.2	2.3	2.4	1.1	0	0	2.4	2.4	2.7	2.2
REW	0	2.4	0	0	2.8	0	2.4	0	3.0	2.2	2.2	2.3	2.4	1.1	0	0	2.4	2.4	2.7	2.2

REF. NO.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	4.8	0	0	0	2.4	2.4	0	0	2.4	4.9	1.3	4.6	4.9	4.5	4.8	4.9	0	5.2	0	0
PLAY	4.8	0	0	0	2.4	2.4	0	0	2.4	4.9	2.5	2.3	4.9	4.5	4.8	4.9	0	5.2	0	0
REC	4.8	2.2	2.7	0	2.4	2.4	0	0	2.4	4.9	2.5	2.3	4.9	4.5	4.8	4.9	0	5.2	0	0
F.F	4.8	0	0	0	2.4	2.4	0	0	2.4	4.9	2.5	2.4	4.9	4.5	4.8	4.9	0	5.2	0	0
REW	4.8	0	0	0	2.4	2.4	0	0	2.4	4.9	2.5	2.4	4.9	4.5	4.8	4.9	0	5.2	0	0

REF. NO.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	2.5	2.7	5.0	0	1.7	5.0	0	4.9	0	0	0	4.8	0	4.9	4.9	0	4.9	0	0	0
PLAY	2.5	2.7	4.9	0	1.7	5.0	4.8	0.1	0	0	0	0	0	4.9	0	0	4.9	4.8	0	0
REC	2.5	2.7	4.9	0	0	5.0	0	0.1	0	0	0	4.8	0	4.9	0	0	4.9	0	0	0
F.F	2.5	2.7	4.9	0	1.7	5.0	0	0.1	0	0	0	4.8	0	4.9	0	4.9	4.9	0	0	0
REW	2.5	2.7	4.9	0	2.4	5.0	0	0.1	0	0	0	4.8	0	4.9	0	4.9	4.9	0	0	0

REF. NO.	IC6001																			
MODE	121	122	123	124																
STOP	0	0	0	4.9																
PLAY	0	0	0	4.9																
REC	0	0	0	4.9																
F.F	0	0	0	4.9																
REW	0	0	0	4.9																

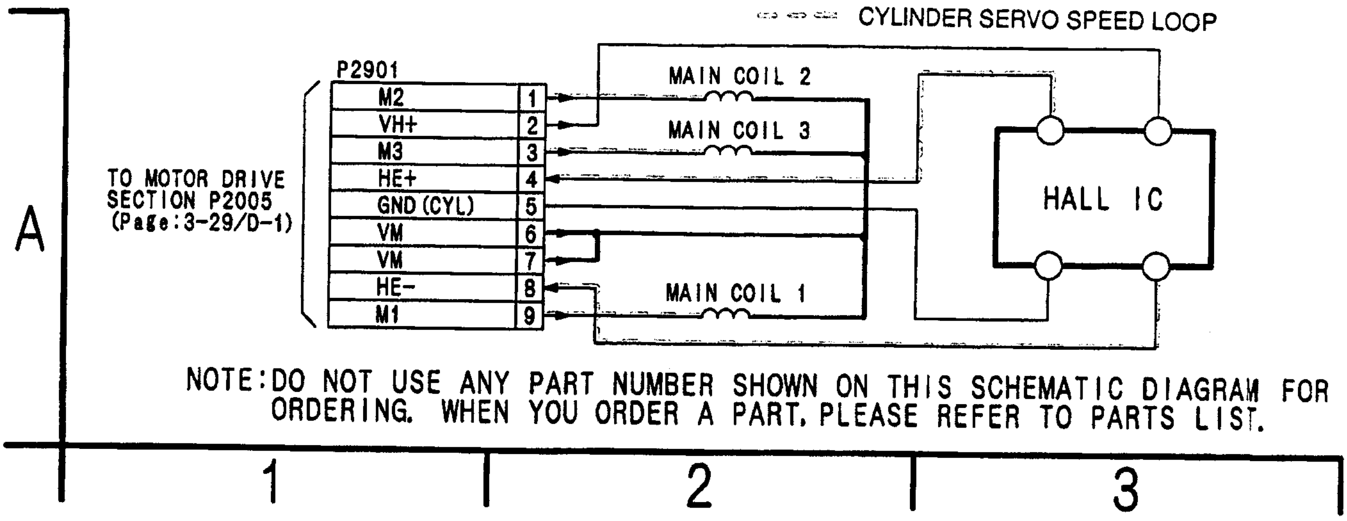
REF. NO.	IC6002										IC6003									
MODE	1	2	3	4							1	2	3	4						
STOP	1.2	0	0	0							2.3	1.2	0	0						
PLAY	1.2	0	5.0	0							2.3	1.1	4.6	0						
REC	1.2	0	5.0	0							2.3	1.1	4.3	0						
F.F	1.2	0	2.2	0							2.3	1.1	2.2	0						
REW	1.2	0	2.2	0							2.3	1.1	2.2	0						

SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q6001			Q6002			Q6003											
MODE	E	C	B	E	C		E	C										
STOP	5.0	–1.6	4.9	0	4.8		0	4.9										
PLAY	5.0	4.9	4.1	0	4.8		0	4.9										
REC	5.0	4.9	4.1	0	4.5		0	4.9										
F.F	5.0	4.9	4.1	0	4.5		0	4.9										
REW	5.0	4.9	4.1	0	4.8		0	4.9										

REF. NO.	QR6002			QR6004						QR6005								
MODE	E	C	B	1	2	3	4	5		E	C	B						
STOP	5.0	0.3	4.8	0	0	4.6	0	4.6		5.0	4.8	4.8						
PLAY	5.0	0.3	4.8	0	0	4.6	0	4.6		5.0	4.8	4.8						
REC	5.0	0.3	4.8	0	0	4.6	0	4.6		5.0	4.8	4.8						
F.F	5.0	0.3	4.8	0	1.5	0	0	0		5.0	4.8	4.8						
REW	5.0	0.3	4.8	0	1.5	0	0	0		5.0	4.8	4.8						

3-8. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM


CYLINDER SERVO SPEED LOOP
P2901
M2
VH+
M3
HE+
GND (CYL)
VM
VM
HE-
M1
1
2
3
4
5
6
7
8
9
TO MOTOR DRIVE SECTION P2005 (Page:3-29/D-1)
MAIN COIL 2
MAIN COIL 3
MAIN COIL 1
HALL IC
A
1
2
3

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

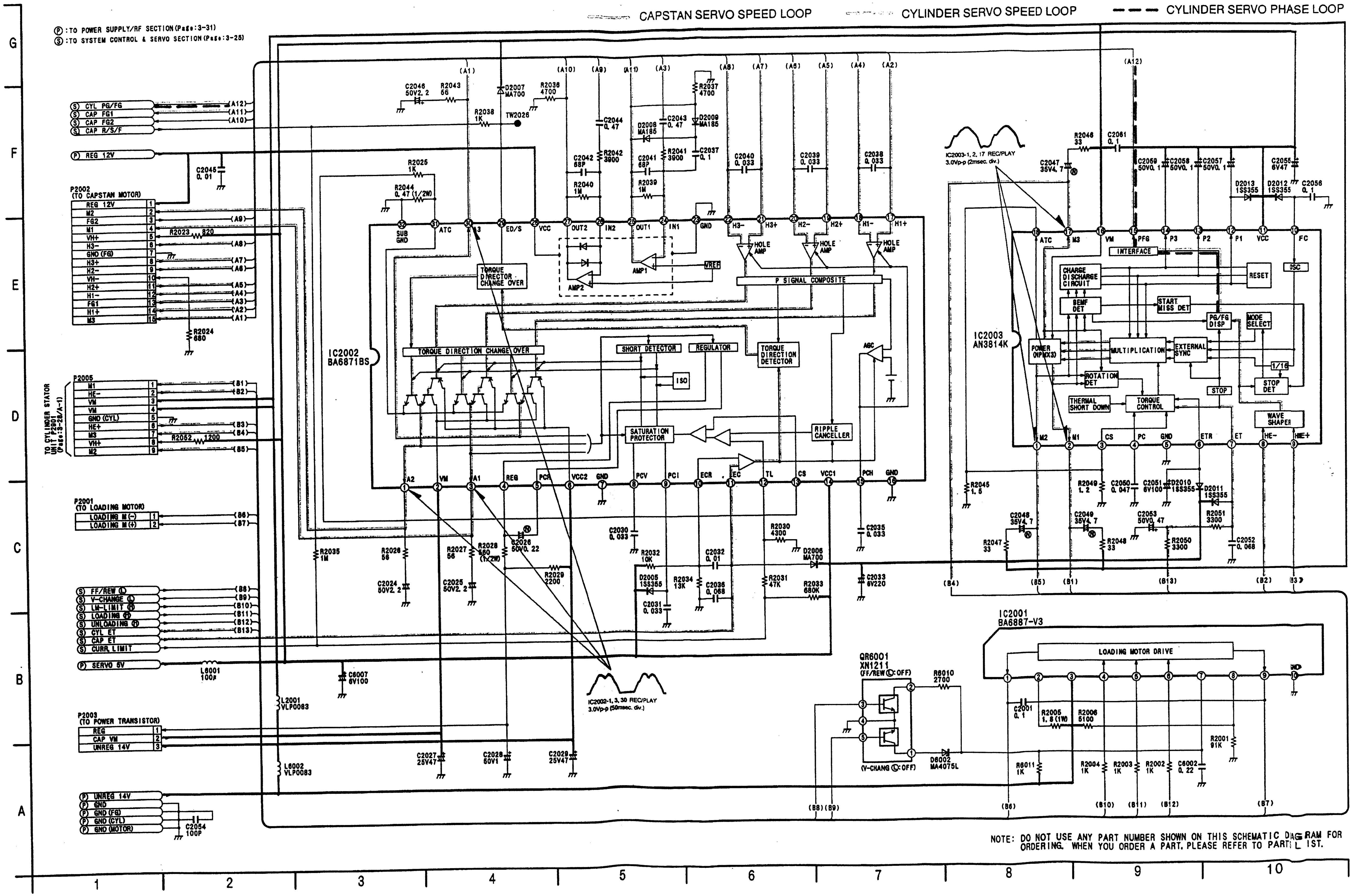
MOTOR DRIVE ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10										
STOP	1.3	14.9	14.9	0	0	0	7.2	9.6	1.4	0										
PLAY	0.9	14.4	14.4	0	0	0	7.2	9.3	1.2	0										
REC	1.5	14.4	14.4	0	0	0	7.2	9.3	1.6	0										
F.F	0.8	14.4	14.4	0	0	0	14.4	9.3	1.6	0										
REW	1.4	14.4	14.4	0	0	0	14.4	9.3	1.0	0										
REF. NO.	IC2002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.8	4.3	1.8	14.2	1.1	14.9	0	0	1.9	2.7	1.3	0	0	4.9	1.4	0	2.2	2.2	2.2	2.2
PLAY	1.7	4.3	1.7	13.2	2.1	14.4	0	0.5	0.6	2.7	2.5	0.4	0	4.9	1.4	0	2.2	2.2	2.2	2.2
REC	1.7	4.3	1.7	13.2	2.1	14.4	0	0.5	0.6	2.7	2.5	0.4	0	4.9	1.4	0	2.2	2.2	2.2	2.2
F.F	6.9	14.3	6.9	7.4	12.5	14.4	0	0.5	0.6	2.7	2.4	0.4	0	4.9	1.4	0	2.2	2.2	2.2	2.2
REW	6.9	14.3	6.9	7.1	12.5	14.4	0	0.5	0.6	2.7	2.4	0.4	0	4.9	1.4	0	2.2	2.2	2.2	2.2
REF. NO.	IC2002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
STOP	2.2	2.2	0	6.4	6.4	6.4	6.4	12.4	2.0	1.8	0	0								
PLAY	2.2	2.2	0	6.4	6.4	6.4	6.4	12.4	0	1.7	0	0								
REC	2.2	2.2	0	6.4	6.4	6.4	6.4	12.4	0	1.7	0	0								
F.F	2.2	2.2	0	6.4	6.4	6.4	6.4	12.4	0	6.9	0	0								
REW	2.2	2.2	0	6.4	6.4	6.4	6.4	12.4	4.9	6.9	0	0								
REF. NO.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	14.9	14.9	0	0	0	2.4	4.6	0.6	0.7	1.0	4.9	4.1	4.1	3.7	4.9	14.9	14.9	0		
PLAY	14.1	14.1	0	0.5	0	2.4	2.3	0.6	0.6	2.6	4.9	3.6	3.6	3.6	1.1	14.4	14.1	0		
REC	14.1	14.1	0	0.5	0	2.4	2.3	0.6	0.6	2.6	4.9	3.6	3.6	3.6	1.1	14.4	14.1	0		
F.F	14.1	14.1	0	0.5	0	2.4	2.4	0.6	0.6	2.6	4.9	3.6	3.6	3.6	1.1	14.4	14.1	0		
REW	14.1	14.1	0	0.5	0	2.4	2.4	0.6	0.6	2.6	4.9	3.6	3.6	3.6	1.1	14.4	14.1	0		

MOTOR DRIVE TRs DC VOLTAGE CHART (SP MODE)

REF. NO.	QR6001				
MODE	1	2	3	4	5
STOP	0	0	4.8	0	4.8
PLAY	0	0	4.8	0	4.8
REC	0	0	4.8	0	4.8
F.F	8.0	14.4	0	0	0
REW	8.0	14.4	0	0	0

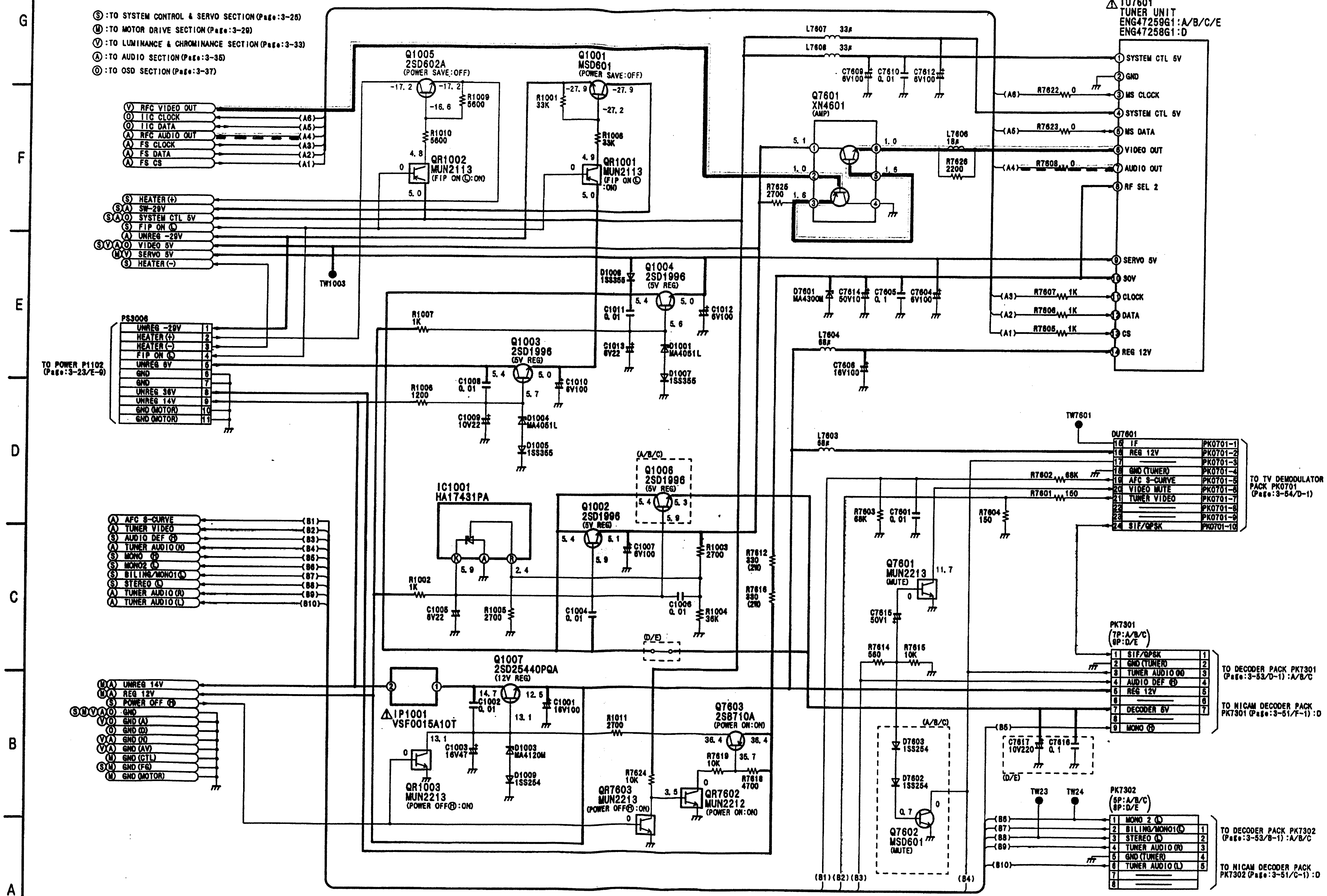
3-9. MOTOR DRIVE SECTION IN MAIN SCHEMATIC DIAGRAM


CAPSTAN SERVO SPEED LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
Ⓟ :TO POWER SUPPLY/RF SECTION(Page:3-31)
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION(Page:3-25)
Ⓢ CYL PG/FG
Ⓢ CAP FG1
Ⓢ CAP FG2
Ⓢ CAP R/S/F
Ⓟ REG 12V
P2002 (TO CAPSTAN MOTOR)
REG 12V
M2
FG2
M1
VH+
H3-
GND (FG)
H3+
H2-
VH-
H2+
H1-
FG1
H1+
M3
R2023 820
R2024 680
C2045 0.01
P2005
M1
HE-
VM
VM
GND (CYL)
HE+
M3
VH+
M2
TO CYLINDER STATOR UNIT P2001 (Page:3-28/A-1)
R2052 1200
P2001 (TO LOADING MOTOR)
LOADING M(-)
LOADING M(+)
Ⓢ FF/REW Ⓛ
Ⓢ V-CHANGE Ⓛ
Ⓢ LM-LIMIT Ⓗ
Ⓢ LOADING Ⓗ
Ⓢ UNLOADING Ⓗ
Ⓢ CYL ET
Ⓢ CAP ET
Ⓢ CURR. LIMIT
Ⓟ SERVO 5V
L6001 100μ
C6007 6V100
L2001 VLP0083
L6002 VLP0083
P2003 (TO POWER TRANSISTOR)
REG
CAP VM
UNREG 14V
Ⓟ UNREG 14V
Ⓟ GND
Ⓟ GND (FG)
Ⓟ GND (CYL)
Ⓟ GND (MOTOR)
C2054 100P
IC2002 BA6871BS
C2046 50V2.2
R2043 56
D2007 MA700
R2036 4700
R2038 1K
TW2026
R2037 4700
C2044 0.47
D2008 MA185
C2043 0.47
D2009 MA185
C2042 68P
R2042 3900
C2041 68P
R2041 3900
C2037 0.1
R2040 1M
R2039 1M
C2040 0.033
C2039 0.033
C2038 0.033
R2025 1K
R2044 0.47 (1/2W)
SUB GND
ATC
H3
ED/S
VCC
OUT2
IN2
OUT1
IN1
GND
H3-
H3+
H2-
H2+
H1-
H1+
HOLE AMP
AMP1
AMP2
VREF
P SIGNAL COMPOSITE
TORQUE DIRECTOR CHANGE OVER
TORQUE DIRECTION CHANGE OVER
SHORT DETECTOR
REGULATOR
TORQUE DIRECTION DETECTOR
AGC
ISO
SATURATION PROTECTOR
RIPPLE CANCELLER
A2
VM
A1
REG
PCR
VCC2
GND
PCV
PCI
ECR
EC
TL
CS
VCC1
PCH
GND
C2030 0.033
R2030 4300
D2006 MA700
C2035 0.033
R2032 10K
C2032 0.01
R2035 1M
R2026 56
R2027 56
R2028 560 (1/2W)
C2026 50V0.22
R2029 2200
C2024 50V2.2
C2025 50V2.2
D2005 1SS355
R2034 13K
C2036 0.068
R2031 47K
R2033 680K
C2033 6V220
C2031 0.033
C2027 25V47
C2028 50V1
C2029 25V47
IC2002-1, 3, 30 REC/PLAY 3.0Vp-p (50msec. div.)
IC2003-1, 2, 17 REC/PLAY 3.0Vp-p (2msec. div.)
IC2003 AN3814K
R2046 33
C2061 0.1
C2047 35V4.7
C2059 50V0.1
C2058 50V0.1
C2057 50V0.1
C2055 6V47
D2013 1SS355
D2012 1SS355
C2056 0.1
ATC
M3
VM
PFG
P3
P2
P1
VCC
FC
INTERFACE
CHARGE DISCHARGE CIRCUIT
RESET
OSC
START MISS DET
BEMF DET
PG/FG DISP
MODE SELECT
POWER (NPNX3)
MULTIPLICATION
EXTERNAL SYNC
1/16
ROTATION DET
STOP
STOP DET
THERMAL SHORT DOWN
TORQUE CONTROL
WAVE SHAPER
M2
M1
CS
PC
GND
ETR
ET
HE-
HE+
R2045 1.5
R2049 1.2
C2050 0.047
C2051 6V100
D2010 1SS355
D2011 1SS355
C2048 35V4.7
C2049 35V4.7
C2053 50V0.47
R2051 3300
R2047 33
R2048 33
R2050 3300
C2052 0.068
IC2001 BA6887-V3
LOADING MOTOR DRIVE
QR6001 XN1211
(FF/REW Ⓛ:OFF)
(V-CHANG Ⓛ:OFF)
R6010 2700
D6002 MA4075L
C2001 0.1
R2005 1.8 (1W)
R2006 5100
R2001 91K
R6011 1K
R2004 1K
R2003 1K
R2002 1K
C6002 0.22
(A1) (A2) (A3) (A4) (A5) (A6) (A7) (A8) (A9) (A10) (A11) (A12)
(B1) (B2) (B3) (B4) (B5) (B6) (B7) (B8) (B9) (B10) (B11) (B12) (B13)
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PART LIST.

3-10 POWER SUPPLY/RF SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


Ⓢ:TO SYSTEM CONTROL & SERVO SECTION (Page:3-25)
Ⓜ:TO MOTOR DRIVE SECTION (Page:3-29)
Ⓥ:TO LUMINANCE & CHROMINANCE SECTION (Page:3-33)
Ⓐ:TO AUDIO SECTION (Page:3-35)
Ⓞ:TO OSD SECTION (Page:3-37)
Ⓥ RFC VIDEO OUT
Ⓞ IIC CLOCK (A6)
Ⓞ IIC DATA (A5)
Ⓐ RFC AUDIO OUT (A4)
Ⓐ FS CLOCK (A3)
Ⓐ FS DATA (A2)
Ⓐ FS CS (A1)
Ⓢ HEATER (+)
ⓈⒶ SW-29V
ⓈⒶⓄ SYSTEM CTL 5V
Ⓢ FIP ON Ⓛ
Ⓐ UNREG -29V
ⓈⓋⒶⓄ VIDEO 5V
ⓂⓋ SERVO 5V
Ⓢ HEATER (-)
TW1003
PS3006
TO POWER P1102 (Page:3-23/E-9)
1 UNREG -29V
2 HEATER (+)
3 HEATER (-)
4 FIP ON Ⓛ
5 UNREG 6V
6 GND
7 GND
8 UNREG 36V
9 UNREG 14V
10 GND (MOTOR)
11 GND (MOTOR)
Ⓐ AFC S-CURVE (B1)
Ⓐ TUNER VIDEO (B2)
Ⓢ AUDIO DEF Ⓗ (B3)
Ⓐ TUNER AUDIO (N) (B4)
Ⓢ MONO Ⓗ (B5)
Ⓢ MONO2 Ⓛ (B6)
Ⓢ BILING/MONO1Ⓛ (B7)
Ⓢ STEREO Ⓛ (B8)
Ⓐ TUNER AUDIO (R) (B9)
Ⓐ TUNER AUDIO (L) (B10)
ⓂⒶ UNREG 14V
ⓂⒶ REG 12V
Ⓢ POWER OFF Ⓗ
ⓈⓂⓋⒶⓄ GND
ⓋⓄ GND (A)
Ⓞ GND (D)
ⓋⒶ GND (N)
ⓋⒶ GND (AV)
Ⓜ GND (CTL)
ⓈⓂ GND (FG)
Ⓜ GND (MOTOR)
Q1005 2SD602A (POWER SAVE:OFF)
-17.2 -17.2 -16.6
R1009 5600
R1010 5600
4.8
QR1002 MUN2113 (FIP ON Ⓛ:ON)
0 5.0
Q1001 MSD601 (POWER SAVE:OFF)
R1001 33K
-27.9 -27.9 -27.2
R1008 33K
4.9
QR1001 MUN2113 (FIP ON Ⓛ:ON)
0 5.0
D1006 1SS355
Q1004 2SD1996 (5V REG)
5.4 5.0 5.6
C1011 0.01
C1012 6V100
C1013 6V22
D1001 MA4051L
D1007 1SS355
R1007 1K
Q1003 2SD1996 (5V REG)
5.4 5.0 5.7
C1008 0.01
C1010 6V100
R1006 1200
C1009 10V22
D1004 MA4051L
D1005 1SS355
(A/B/C)
Q1006 2SD1996 (5V REG)
5.4 5.3 5.9
IC1001 HA17431PA
K A R
5.9 2.4
R1002 1K
C1005 6V22
R1005 2700
Q1002 2SD1996 (5V REG)
5.4 5.1 5.9
C1007 6V100
R1003 2700
C1004 0.01
C1006 0.01
R1004 36K
(D/E)
Q1007 2SD25440PQA (12V REG)
14.7 12.5 13.1
C1002 0.01
C1001 16V100
IP1001 VSF0015A10T
13.1
C1003 16V47
D1003 MA4120M
D1009 1SS254
QR1003 MUN2213 (POWER OFFⒽ:ON)
0
R1011 2700
Q7603 2SB710A (POWER ON:ON)
36.4 36.4 35.7
R7619 10K
R7624 10K
R7618 4700
3.5
QR7603 MUN2213 (POWER OFFⒽ:ON)
0
QR7602 MUN2212 (POWER ON:ON)
L7607 33μ
L7608 33μ
C7609 6V100
C7610 0.01
C7612 6V100
Q7601 XN4601 (AMP)
5.1 1.0 1.0 1.6 1.6
R7625 2700
L7606 18μ
R7626 2200
R7622 0
R7623 0
R7608 0
D7601 MA4300M
C7614 50V10
C7605 0.1
C7604 6V100
R7607 1K
R7606 1K
R7605 1K
L7604 68μ
C7606 16V100
L7603 68μ
TW7601
R7602 68K
R7601 150
R7603 68K
C7601 0.01
R7604 150
R7612 330 (2W)
R7616 330 (2W)
Q7601 MUN2213 (MUTE)
11.7 0
C7615 50V1
R7614 560
R7615 10K
(A/B/C)
D7603 1SS254
D7602 1SS254
0.7 0
Q7602 MSD601 (MUTE)
C7617 10V220
C7616 0.1
(D/E)
TW23 TW24
(B1) (B2) (B3) (B4)
(B5) (B6) (B7) (B8) (B9) (B10)
TU7601 TUNER UNIT ENG47259G1:A/B/C/E ENG47258G1:D
① SYSTEM CTL 5V
② GND
③ MS CLOCK
④ SYSTEM CTL 5V
⑤ MS DATA
⑥ VIDEO OUT
⑦ AUDIO OUT
⑧ RF SEL 2
⑨ SERVO 5V
⑩ 30V
⑪ CLOCK
⑫ DATA
⑬ CS
⑭ REG 12V
DU7601
15 IF PK0701-1
16 REG 12V PK0701-2
17 PK0701-3
18 GND (TUNER) PK0701-4
19 AFC S-CURVE PK0701-5
20 VIDEO MUTE PK0701-6
21 TUNER VIDEO PK0701-7
22 PK0701-8
23 PK0701-9
24 SIF/QPSK PK0701-10
TO TV DEMODULATOR PACK PK0701 (Page:3-54/D-1)
PK7301 (7P:A/B/C 9P:D/E)
1 SIF/QPSK 1
2 GND (TUNER) 2
3 TUNER AUDIO (N) 3
4 AUDIO DEF Ⓗ 4
5 REG 12V 5
6 6
7 DECODER 5V 7
8
9 MONO Ⓗ
TO DECODER PACK PK7301 (Page:3-53/D-1):A/B/C
TO NICAM DECODER PACK PK7301 (Page:3-51/F-1):D
PK7302 (5P:A/B/C 8P:D/E)
1 MONO 2 Ⓛ
2 BILING/MONO1Ⓛ 1
3 STEREO Ⓛ 2
4 TUNER AUDIO (R) 3
5 GND (TUNER) 4
6 TUNER AUDIO (L) 5
7
8
TO DECODER PACK PK7302 (Page:3-53/B-1):A/B/C
TO NICAM DECODER PACK PK7302 (Page:3-51/C-1):D
G F E D C B A
1 2 3 4 5 6 7 8 9

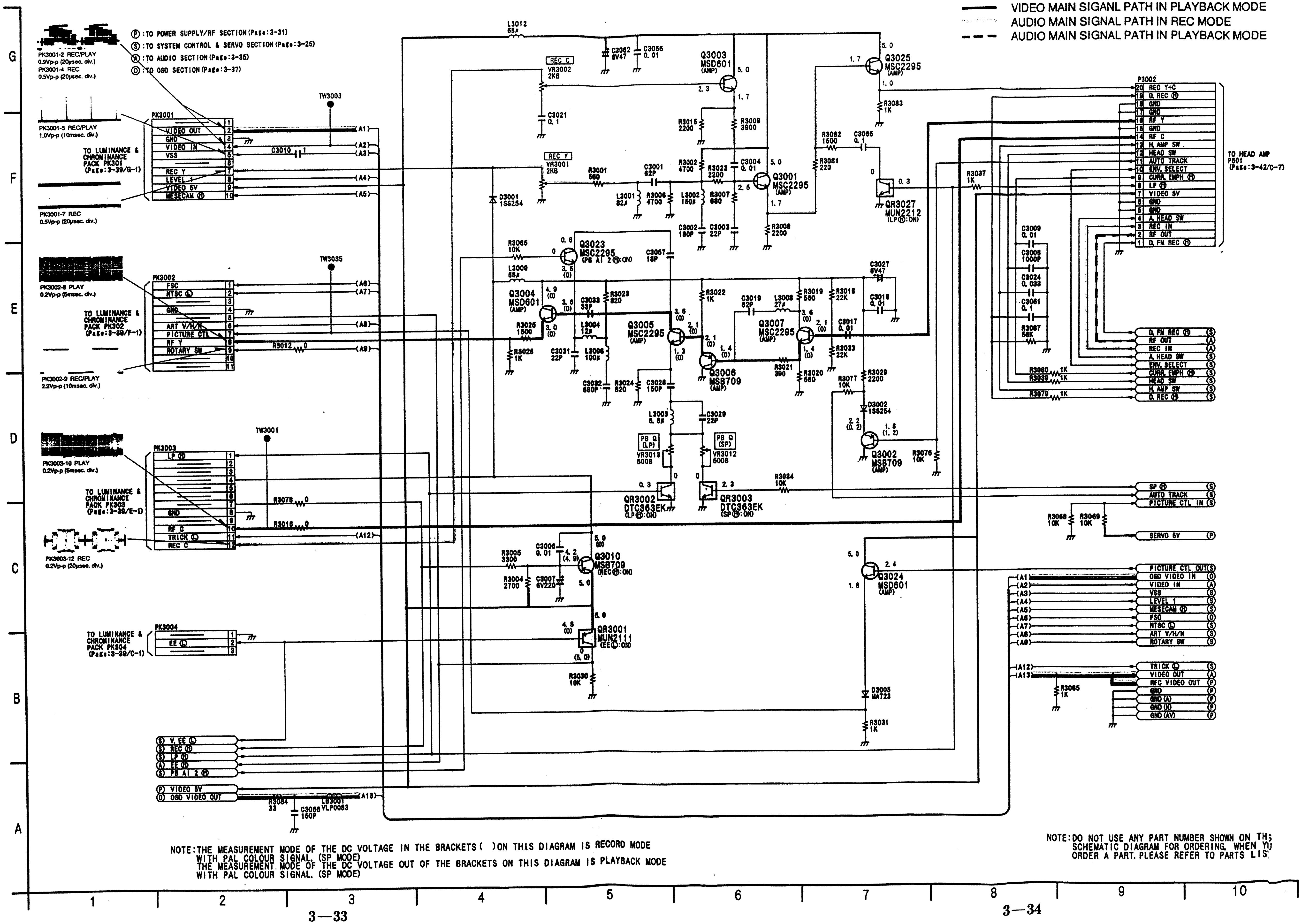
IMPORTANT SAFTY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

3-11. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGANL PATH IN REC MODE
VIDEO MAIN SIGANL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


Ⓟ:TO POWER SUPPLY/RF SECTION(Page:3-31)
Ⓢ:TO SYSTEM CONTROL & SERVO SECTION(Page:3-25)
Ⓐ:TO AUDIO SECTION(Page:3-35)
Ⓞ:TO OSD SECTION(Page:3-37)
PK3001-2 REC/PLAY 0.9Vp-p (20μsec. div.)
PK3001-4 REC 0.5Vp-p (20μsec. div.)
PK3001-5 REC/PLAY 1.0Vp-p (10msec. div.)
PK3001-7 REC 0.5Vp-p (20μsec. div.)
PK3002-8 PLAY 0.2Vp-p (5msec. div.)
PK3002-9 REC/PLAY 2.2Vp-p (10msec. div.)
PK3003-10 PLAY 0.2Vp-p (5msec. div.)
PK3003-12 REC 0.2Vp-p (20μsec. div.)
TO LUMINANCE & CHROMINANCE PACK PK301 (Page:3-39/G-1)
TO LUMINANCE & CHROMINANCE PACK PK302 (Page:3-39/F-1)
TO LUMINANCE & CHROMINANCE PACK PK303 (Page:3-39/E-1)
TO LUMINANCE & CHROMINANCE PACK PK304 (Page:3-39/C-1)
PK3001
VIDEO OUT
GND
VIDEO IN
VSS
REC Y
LEVEL 1
VIDEO 5V
MESECAM Ⓡ
PK3002
FSC
NTSC Ⓛ
GND
ART V/H/N
PICTURE CTL
RF Y
ROTARY SW
PK3003
LP Ⓡ
GND
RF C
TRICK Ⓛ
REC C
PK3004
EE Ⓛ
TW3003
TW3035
TW3001
L3012 68μ
REC C
VR3002 2KB
REC Y
VR3001 2KB
Q3003 MSD601 (AMP)
Q3025 MSC2295 (AMP)
Q3001 MSC2295 (AMP)
QR3027 MUN2212 (LPⓇ:ON)
Q3023 MSC2295 (PB AI 2Ⓗ:ON)
Q3004 MSD601 (AMP)
Q3005 MSC2295 (AMP)
Q3006 MSB709 (AMP)
Q3007 MSC2295 (AMP)
Q3002 MSB709 (AMP)
QR3002 DTC363EK (LPⓇ:ON)
QR3003 DTC363EK (SPⓇ:ON)
PB Q (LP)
VR3013 500B
PB Q (SP)
VR3012 500B
Q3010 MSB709 (RECⓇ:ON)
QR3001 MUN2111 (EEⓁ:ON)
Q3024 MSD601 (AMP)
D3001 1SS254
D3002 1SS254
D3005 MA723
P3002
REC Y+C
D. REC Ⓗ
GND
RF Y
RF C
H. AMP SW
HEAD SW
AUTO TRACK
ENV. SELECT
CURR. EMPH Ⓗ
LP Ⓗ
VIDEO 5V
A. HEAD SW
REC IN
RF OUT
D. FM REC Ⓗ
TO HEAD AMP P501 (Page:3-42/C-7)
SP Ⓗ
PICTURE CTL IN
SERVO 5V
PICTURE CTL OUT
OSD VIDEO IN
LEVEL 1
MESECAM Ⓗ
RFC VIDEO OUT
GND (A)
GND (V)
GND (AV)
V. EE Ⓛ
REC Ⓗ
EE Ⓗ
PB AI 2 Ⓗ
VIDEO 5V
OSD VIDEO OUT
LB3001 VLP0083
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

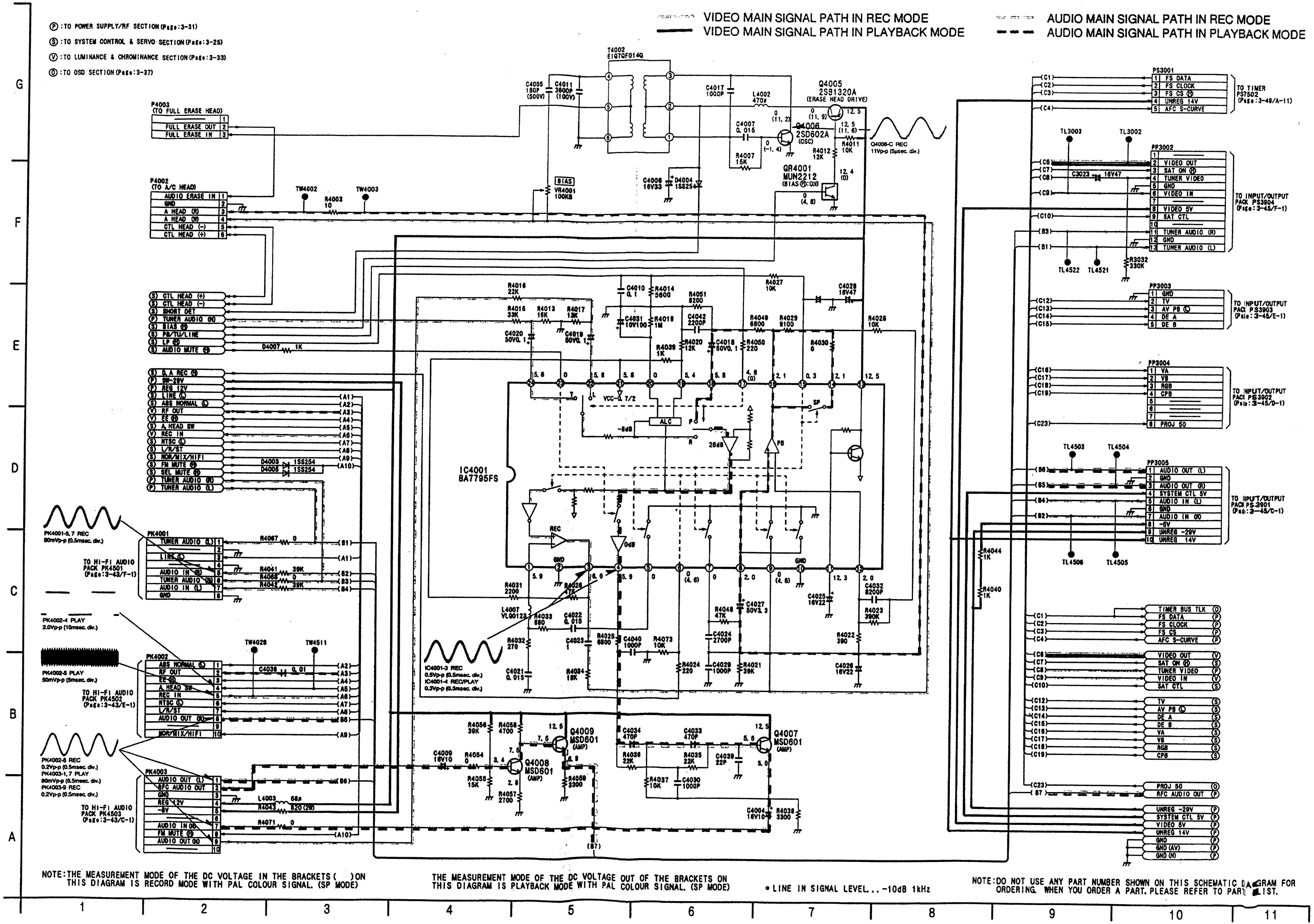
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART. PLEASE REFER TO PARTS LIST

3-12 AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

Ⓟ :TO POWER SUPPLY/RF SECTION(Page:3-31)
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION(Page:3-25)
Ⓥ :TO LUMINANCE & CHROMINANCE SECTION(Page:3-33)
Ⓞ :TO OSD SECTION(Page:3-37)



G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
T4002
E1Q7QF014Q
P4003
(TO FULL ERASE HEAD)
FULL ERASE OUT
FULL ERASE IN
P4002
(TO A/C HEAD)
AUDIO ERASE IN
GND
A HEAD (R)
A HEAD (L)
CTL HEAD (-)
CTL HEAD (+)
TW4002
TW4003
R4003
10
C4005
180P
(500V)
C4011
3600P
(100V)
BIAS
VR4001
100KB
C4006
16V33
D4004
1SS254
C4017
1000P
L4002
470μ
C4007
0.015
R4007
15K
Q4005
2SB1320A
(ERASE HEAD DRIVE)
Q4006
2SD602A
(OSC)
R4011
10K
R4012
12K
QR4001
MUN2212
(BIAS Ⓗ:ON)
Q4006-C REC
11Vp-p (5μsec. div.)
CTL HEAD (+)
CTL HEAD (-)
SHORT DET
TUNER AUDIO (R)
BIAS Ⓗ
PB/TU/LINE
LP Ⓗ
AUDIO MUTE Ⓗ
D4007
1K
Q.A REC Ⓗ
SW-29V
REG 12V
LINE Ⓛ
ABS NORMAL Ⓛ
RF OUT
EE Ⓗ
A.HEAD SW
REC IN
NTSC Ⓛ
L/R/ST
NOR/MIX/HIFI
FM MUTE Ⓗ
SEL MUTE Ⓗ
TUNER AUDIO (R)
TUNER AUDIO (L)
D4003
D4005
1SS254
IC4001
BA7795FS
ALC
REC
PB
GND
-8dB
28dB
0dB
VCC-①.T/2
SP
R4016
22K
R4015
33K
R4013
15K
R4017
18K
C4010
0.1
R4014
5600
R4051
8200
R4027
10K
C4028
16V47
C4020
50V0.1
C4019
50V0.1
C4031
16V100
R4019
1M
C4042
2200P
R4049
6800
R4029
8100
R4028
10K
R4039
1K
R4020
12K
C4018
50V0.1
R4050
220
R4030
0
R4031
2200
L4007
VL9012
R4033
680
C4022
0.015
R4032
270
C4023
C4021
0.015
R4034
18K
R4025
6800
C4040
1000P
R4073
10K
R4024
220
C4029
1000P
R4021
39K
C4024
2700P
R4048
47K
C4027
50V3.3
C4025
16V22
C4032
8200P
R4023
390K
R4022
390
C4026
16V22
IC4001-3 REC
0.5Vp-p (0.5msec. div.)
IC4001-4 REC/PLAY
0.3Vp-p (0.5msec. div.)
PK4001-5,7 REC
80mVp-p (0.5msec. div.)
TO HI-FI AUDIO PACK PK4501
(Page:3-43/F-1)
PK4001
TUNER AUDIO (L)
LINE Ⓛ
AUDIO IN (R)
TUNER AUDIO (R)
AUDIO IN (L)
GND
R4067
R4041
39K
R4068
R4042
39K
PK4002-4 PLAY
2.0Vp-p (10msec. div.)
PK4002-5 PLAY
50mVp-p (5msec. div.)
TO HI-FI AUDIO PACK PK4502
(Page:3-43/E-1)
PK4002
ABS NORMAL Ⓛ
RF OUT
EE Ⓗ
A.HEAD SW
REC IN
NTSC Ⓛ
L/R/ST
AUDIO OUT (R)
NOR/MIX/HIFI
TW4029
TW4511
C4036
0.01
PK4002-8 REC
0.2Vp-p (0.5msec. div.)
PK4003-1,7 PLAY
80mVp-p (0.5msec. div.)
PK4003-9 REC
0.2Vp-p (0.5msec. div.)
TO HI-FI AUDIO PACK PK4503
(Page:3-43/C-1)
PK4003
AUDIO OUT (L)
AFC AUDIO OUT
GND
REG 12V
-8V
AUDIO IN (L)
FM MUTE Ⓗ
AUDIO OUT (R)
L4003
68μ
R4043
820(2W)
R4071
0
R4056
39K
R4058
4700
Q4009
MSD601
(AMP)
C4009
16V10
R4054
0
Q4008
MSD601
(AMP)
R4055
15K
R4057
2700
R4059
3300
C4034
470P
C4033
470P
Q4007
MSD601
(AMP)
R4036
22K
R4035
22K
C4039
22P
R4037
10K
C4030
1000P
C4004
16V10
R4038
3300
PS3001
FS DATA
FS CLOCK
FS CS Ⓗ
UNREG 14V
AFC S-CURVE
TO TIMER PS7502
(Page:3-49/A-11)
TL3003
TL3002
PP3002
VIDEO OUT
SAT ON Ⓗ
TUNER VIDEO
GND
VIDEO IN
VIDEO 5V
SAT CTL
TUNER AUDIO (R)
GND
TUNER AUDIO (L)
C3023
16V47
TO INPUT/OUTPUT PACK PS3904
(Page:3-45/F-1)
TL4522
TL4521
R3032
330K
PP3003
GND
TV
AV PB Ⓛ
DE A
DE B
TO INPUT/OUTPUT PACK PS3903
(Page:3-45/E-1)
PP3004
VA
VB
RGB
CPB
PROJ 50
TO INPUT/OUTPUT PACK PS3902
(Page:3-45/D-1)
TL4503
TL4504
PP3005
AUDIO OUT (L)
GND
AUDIO OUT (R)
SYSTEM CTL 5V
AUDIO IN (L)
GND
AUDIO IN (R)
-8V
UNREG -29V
UNREG 14V
TO INPUT/OUTPUT PACK PS3901
(Page:3-45/C-1)
TL4506
TL4505
R4044
1K
R4040
1K
TIMER BUS TLK
FS DATA
FS CLOCK
FS CS
AFC S-CURVE
VIDEO OUT
SAT ON Ⓗ
TUNER VIDEO
VIDEO IN
SAT CTL
TV
AV PB Ⓛ
DE A
DE B
VA
VB
RGB
CPB
PROJ 50
AFC AUDIO OUT
UNREG -29V
SYSTEM CTL 5V
VIDEO 5V
UNREG 14V
GND
GND (AV)
GND (H)

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

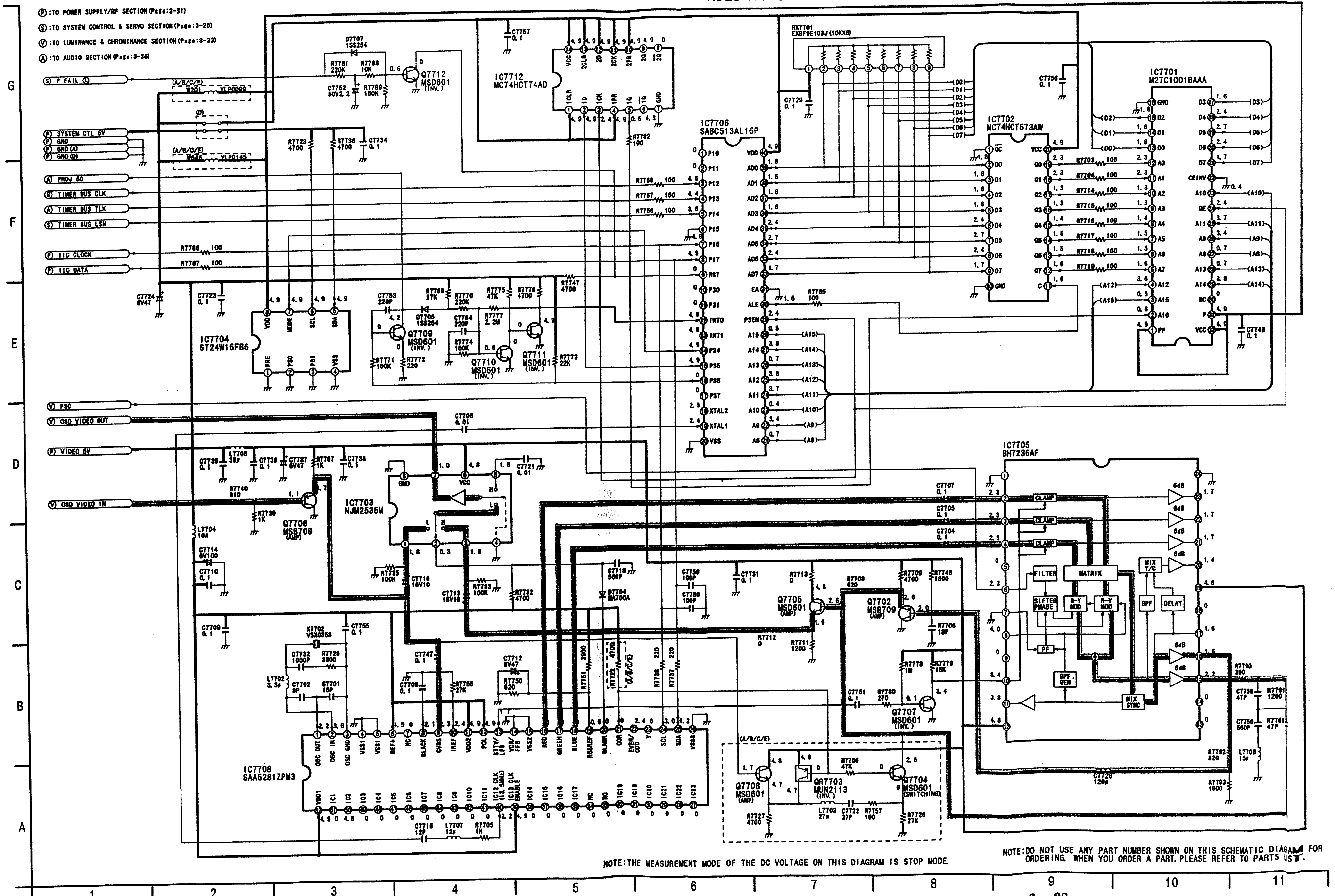
• LINE IN SIGNAL LEVEL...-10dB 1kHz

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-13 OSD SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

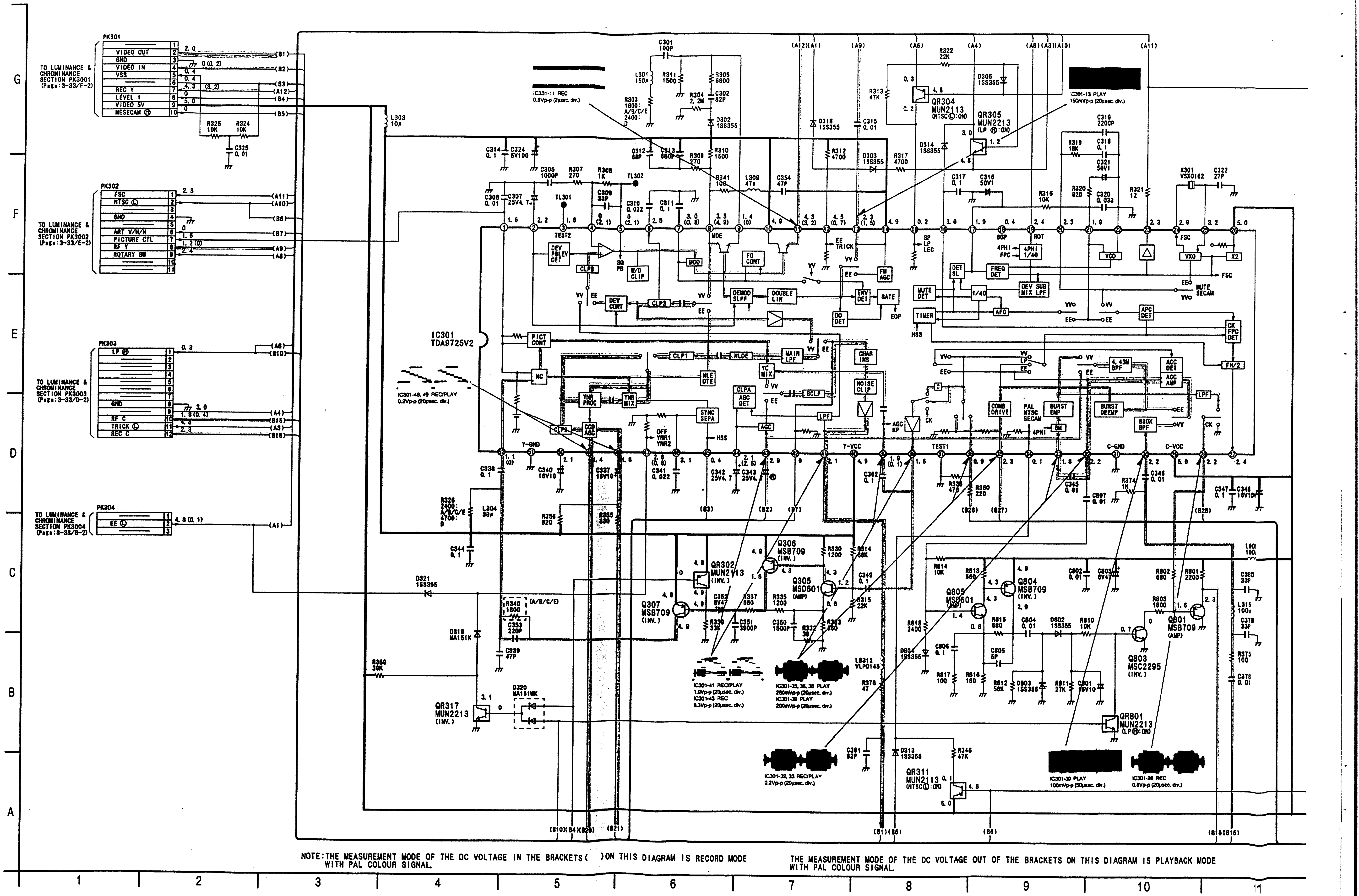

G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
Ⓢ P FAIL Ⓛ
Ⓟ SYSTEM CTL 5V
Ⓟ GND
Ⓟ GND (A)
Ⓟ GND (D)
Ⓐ PROJ 50
Ⓢ TIMER BUS CLK
Ⓐ TIMER BUS TLK
Ⓢ TIMER BUS LSN
Ⓟ IIC CLOCK
Ⓟ IIC DATA
Ⓥ FSC
Ⓥ OSD VIDEO OUT
Ⓟ VIDEO 5V
Ⓥ OSD VIDEO IN
(A/B/C/E)
W201
VLP0099
(D)
W246
VLP0145
Q7712
MSD601
(INV.)
D7707
1SS254
IC7712
MC74HCT74AD
RX7701
EXBF9E103J (10KX8)
IC7706
SAB80513AL16P
IC7702
MC74HCT573AW
IC7701
M27C1001BAAA
IC7704
ST24W16FB6
Q7709
MSD601
(INV.)
Q7710
MSD601
(INV.)
Q7711
MSD601
(INV.)
D7705
1SS254
IC7705
BH7236AF
CLAMP
FILTER
MATRIX
MIX Y/C
SIFTER PHASE
B-Y MOD
R-Y MOD
BPF
DELAY
PF
BPF GEN
MIX SYNC
6dB
IC7703
NJM2535M
Q7706
MSB709
(AMP)
Q7705
MSD601
(AMP)
Q7702
MSB709
(AMP)
Q7707
MSD601
(INV.)
D7704
MA700A
X7702
VSX0353
IC7708
SAA5281ZPM3
Q7708
MSD601
(AMP)
QR7703
MUN2113
(INV.)
Q7704
MSD601
(SWITCHING)
3—37
3—38

Ⓟ :TO POWER SUPPLY/RF SECTION (Page:3-31)
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION (Page:3-25)
Ⓥ :TO LUMINANCE & CHROMINANCE SECTION (Page:3-33)
Ⓐ :TO AUDIO SECTION (Page:3-35)

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

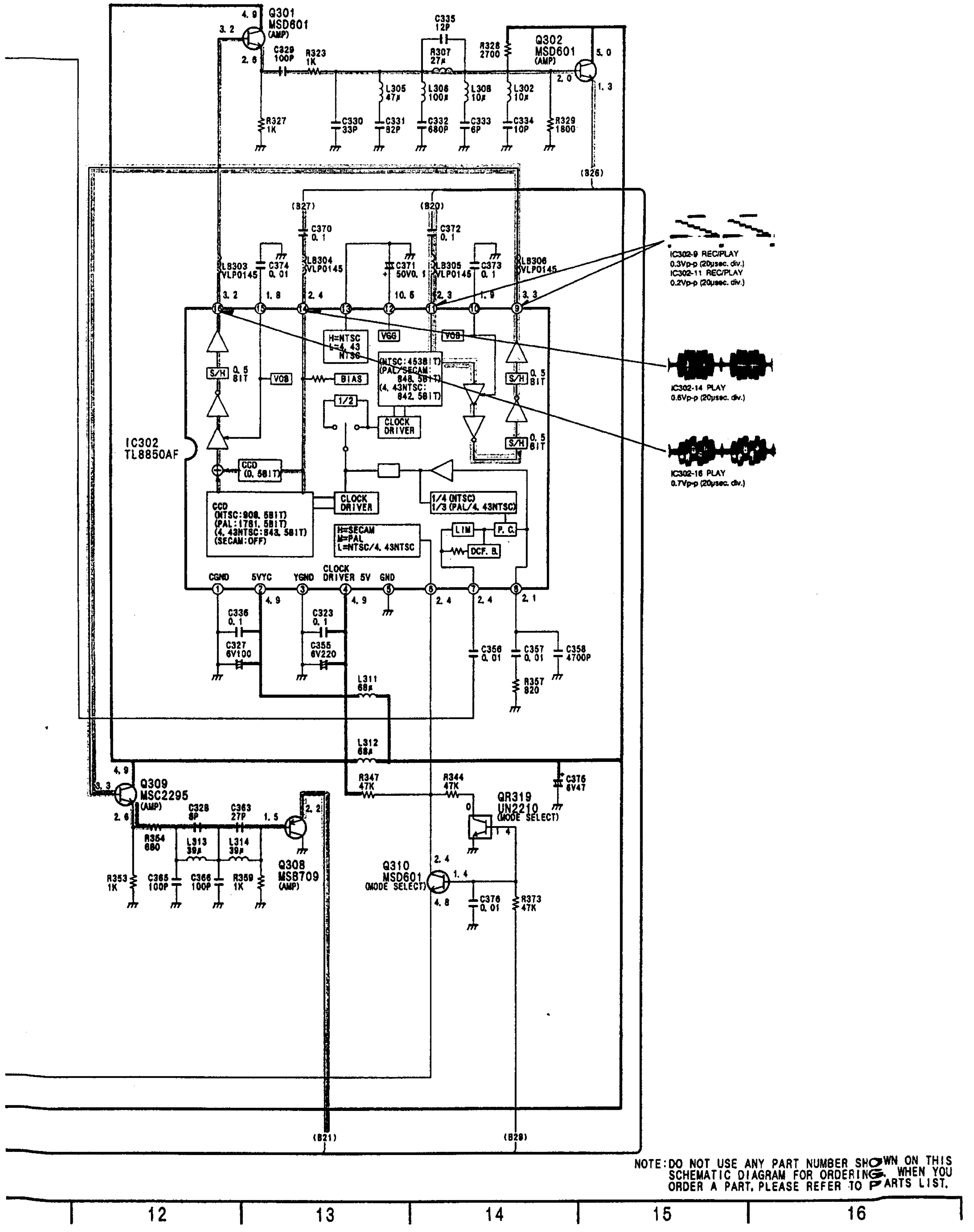
3-14. LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM


PK301
VIDEO OUT
GND
VIDEO IN
VSS
REC Y
LEVEL 1
VIDEO 5V
MESECAM
TO LUMINANCE & CHROMINANCE SECTION PK3001 (Page:3-33/F-2)
PK302
FSC
NTSC
GND
ART V/H/N
PICTURE CTL
RF Y
ROTARY SW
TO LUMINANCE & CHROMINANCE SECTION PK3002 (Page:3-33/E-2)
PK303
LP
GND
RF C
TRICK
REC C
TO LUMINANCE & CHROMINANCE SECTION PK3003 (Page:3-33/D-2)
PK304
EE
TO LUMINANCE & CHROMINANCE SECTION PK3004 (Page:3-33/B-2)
IC301
TDA9725V2
IC301-11 REC
0.6Vp-p (2μsec. div.)
IC301-13 PLAY
150mVp-p (20μsec. div.)
IC301-48, 49 REC/PLAY
0.2Vp-p (20μsec. div.)
IC301-41 REC/PLAY
1.0Vp-p (20μsec. div.)
IC301-43 REC
0.3Vp-p (20μsec. div.)
IC301-35, 36, 38 PLAY
280mVp-p (20μsec. div.)
IC301-38 PLAY
200mVp-p (20μsec. div.)
IC301-32, 33 REC/PLAY
0.2Vp-p (20μsec. div.)
IC301-30 PLAY
100mVp-p (50μsec. div.)
IC301-26 REC
0.6Vp-p (20μsec. div.)
QR304
MUN2113
(NTSC:ON)
QR305
MUN2213
(LP:ON)
QR302
MUN2113
(INV.)
Q306
MSB709
(INV.)
Q305
MSD601
(AMP)
Q307
MSB709
(INV.)
QR317
MUN2213
(INV.)
QR311
MUN2113
(NTSC:ON)
Q805
MSD601
(AMP)
Q804
MSB709
(INV.)
Q801
MSB709
(AMP)
Q803
MSC2295
(INV.)
QR801
MUN2213
(LP:ON)
X301
VSX0162
TL301
TL302
TEST2
TEST1
Y-GND
Y-VCC
C-GND
C-VCC
1 2 3 4 5 6 7 8 9 10 11
G F E D C B A

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.

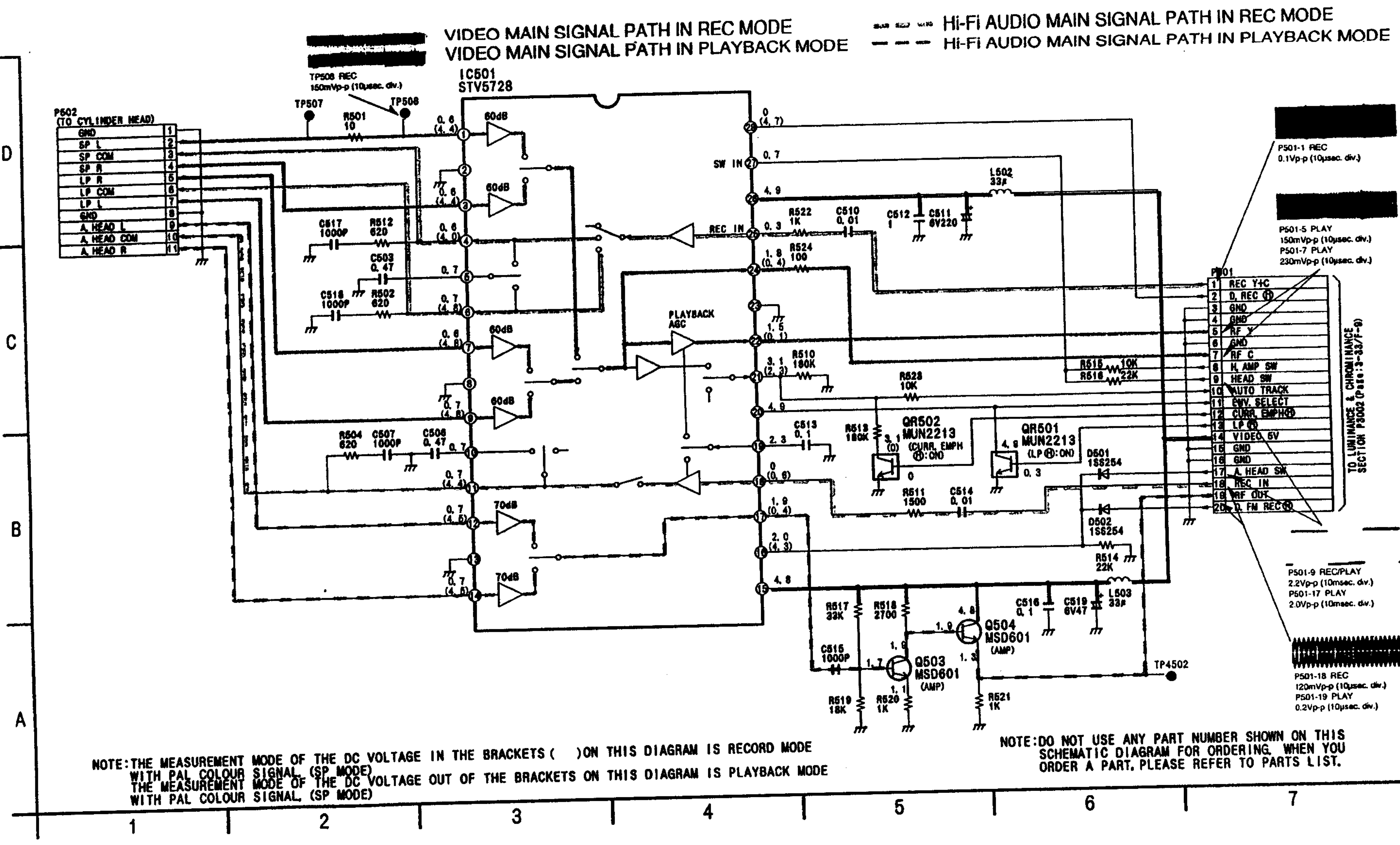
MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE



Q301
MSD601
(AMP)
4. 9
3. 2
2. 6
C329
100P
R323
1K
R327
1K
C330
33P
L305
47µ
C331
82P
C335
12P
R307
27µ
L306
100µ
C332
680P
L308
10µ
C333
6P
R328
2700
L302
10µ
C334
10P
R329
1800
Q302
MSD601
(AMP)
5. 0
2. 0
1. 3
(B26)
(B27)
(B20)
C370
0. 1
C372
0. 1
LB303
VLP0145
C374
0. 01
LB304
VLP0145
C371
50V0. 1
LB305
VLP0145
C373
0. 1
LB306
VLP0145
3. 2
1. 8
2. 4
10. 5
2. 3
1. 9
3. 3
IC302-9 REC/PLAY
0.3Vp-p (20µsec. div.)
IC302-11 REC/PLAY
0.2Vp-p (20µsec. div.)
H=NTSC
L=4. 43
NTSC
VGG
VOB
(NTSC:453BIT)
(PAL/SECAM:
848. 5BIT)
(4. 43NTSC:
842. 5BIT)
S/H
0. 5
BIT
VOB
BIAS
1/2
CLOCK
DRIVER
IC302-14 PLAY
0.6Vp-p (20µsec. div.)
IC302-16 PLAY
0.7Vp-p (20µsec. div.)
IC302
TL8850AF
CCD
(0. 5BIT)
CCD
(NTSC:908. 5BIT)
(PAL:1781. 5BIT)
(4. 43NTSC:843. 5BIT)
(SECAM:OFF)
CLOCK
DRIVER
1/4 (NTSC)
1/3 (PAL/4. 43NTSC)
LIM
P. C.
DCF. B.
H=SECAM
M=PAL
L=NTSC/4. 43NTSC
CGND
5VYC
YGND
CLOCK
DRIVER 5V
GND
4. 9
4. 9
2. 4
2. 4
2. 1
C336
0. 1
C327
6V100
C323
0. 1
C355
6V220
L311
68µ
C356
0. 01
C357
0. 01
C358
4700P
R357
820
L312
68µ
Q309
MSC2295
(AMP)
4. 9
3. 3
2. 6
C328
6P
C363
27P
1. 5
2. 2
R354
680
L313
39µ
L314
39µ
Q308
MSB709
(AMP)
R353
1K
C365
100P
C366
100P
R359
1K
R347
47K
R344
47K
QR319
UN2210
(MODE SELECT)
C375
6V47
0
1. 4
2. 4
Q310
MSD601
(MODE SELECT)
1. 4
4. 8
C376
0. 01
R373
47K
(B21)
(B28)
12
13
14
15
16

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

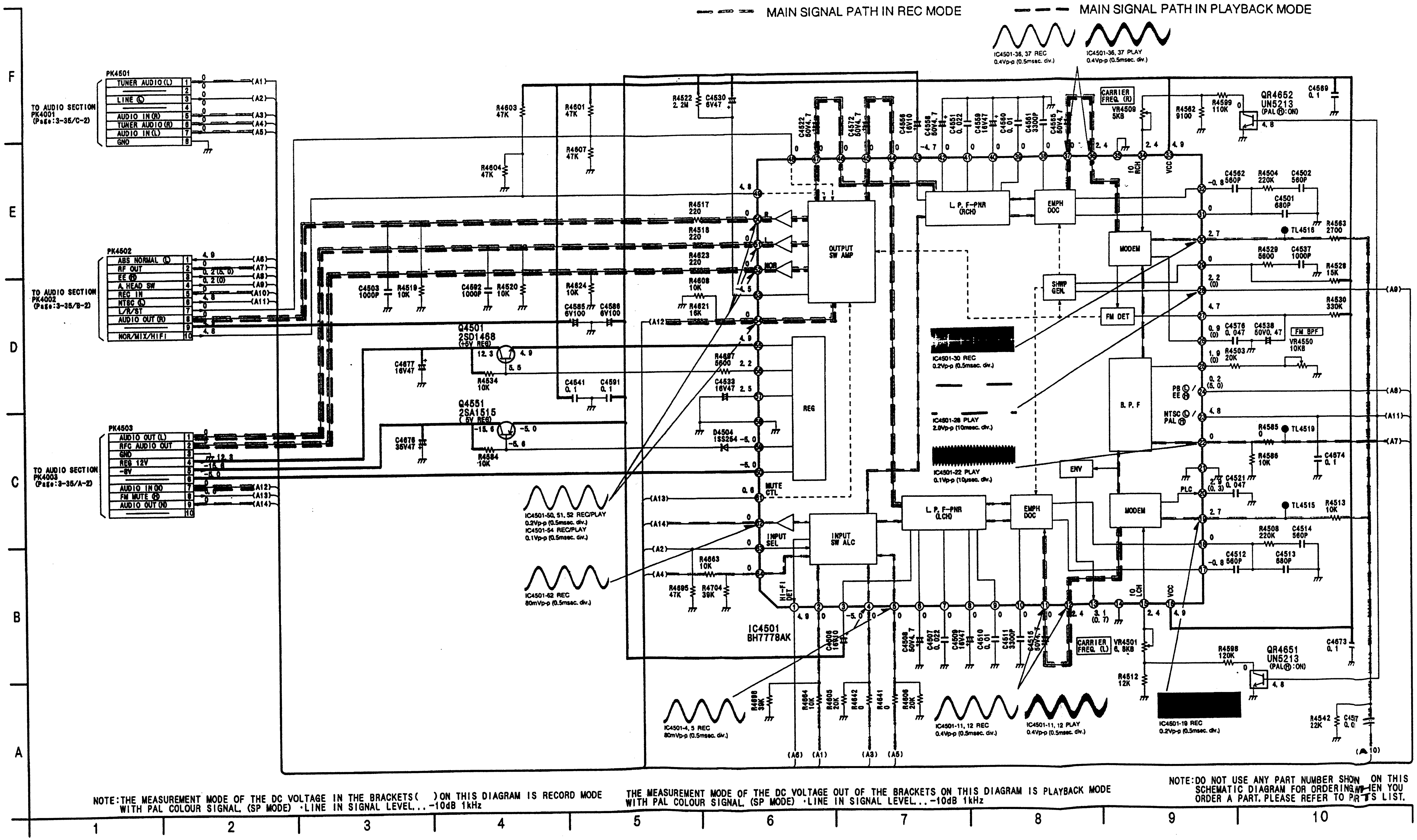
3-15. HEAD AMP SCHEMATIC DIAGRAM


VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
IC501
STV5728
P502
(TO CYLINDER HEAD)
1 GND
2 SP L
3 SP COM
4 SP R
5 LP R
6 LP COM
7 LP L
8 GND
9 A. HEAD L
10 A. HEAD COM
11 A. HEAD R
TP507
TP508
TP508 REC
150mVp-p (10μsec. div.)
R501 10
C517 1000P
R512 620
C503 0.47
C518 1000P
R502 620
R504 620
C507 1000P
C506 0.47
60dB
70dB
SW IN
REC IN
PLAYBACK AGC
R522 1K
C510 0.01
C512 1
C511 6V220
L502 33μ
R524 100
R510 180K
R528 10K
C513 0.1
R513 180K
QR502 MUN2213 (CURR. EMPH Ⓗ:ON)
QR501 MUN2213 (LP Ⓗ:ON)
R511 1500
C514 0.01
R515 10K
R516 22K
D501 1SS254
D502 1SS254
R514 22K
L503 33μ
C516 0.1
C519 6V47
R517 33K
R518 2700
C515 1000P
R519 18K
R520 1K
Q503 MSD601 (AMP)
Q504 MSD601 (AMP)
R521 1K
TP4502
P501
1 REC Y+C
2 D. REC Ⓗ
3 GND
4 GND
5 RF Y
6 GND
7 RF C
8 H. AMP SW
9 HEAD SW
10 AUTO TRACK
11 ENV. SELECT
12 CURR. EMPH Ⓗ
13 LP Ⓗ
14 VIDEO 6V
15 GND
16 GND
17 A. HEAD SW
18 REC IN
19 RF OUT
20 D. FM REC Ⓗ
TO LUMINANCE & CHROMINANCE SECTION P3002 (Page:3-33/F-9)
P501-1 REC
0.1Vp-p (10μsec. div.)
P501-5 PLAY
150mVp-p (10μsec. div.)
P501-7 PLAY
230mVp-p (10μsec. div.)
P501-9 REC/PLAY
2.2Vp-p (10msec. div.)
P501-17 PLAY
2.0Vp-p (10msec. div.)
P501-18 REC
120mVp-p (10μsec. div.)
P501-19 PLAY
0.2Vp-p (10μsec. div.)
A
B
C
D
1
2
3
4
5
6
7

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-16. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
IC4501-36, 37 REC 0.4Vp-p (0.5msec. div.)
IC4501-36, 37 PLAY 0.4Vp-p (0.5msec. div.)
PK4501
TUNER AUDIO (L)
LINE
AUDIO IN (R)
TUNER AUDIO (R)
AUDIO IN (L)
GND
TO AUDIO SECTION PK4001 (Page:3-35/C-2)
PK4502
ABS NORMAL
RF OUT
EE
A. HEAD SW
REC IN
NTSC
L/R/ST
AUDIO OUT (R)
NOR/MIX/HIFI
TO AUDIO SECTION PK4002 (Page:3-35/B-2)
PK4503
AUDIO OUT (L)
RFC AUDIO OUT
GND
REG 12V
-8V
AUDIO IN (R)
FM MUTE
AUDIO OUT (R)
TO AUDIO SECTION PK4003 (Page:3-35/A-2)
Q4501 2SD1468 (+5V REG)
Q4551 2SA1515 (-5V REG)
OUTPUT SW AMP
REG
MUTE CTL
INPUT SEL
INPUT SW ALC
HI-FI DET
IC4501 BH7778AK
L. P. F-PNR (RCH)
L. P. F-PNR (LCH)
EMPH DOC
MODEM
SHWP GEN.
FM DET
B. P. F
ENV
PLC
CARRIER FREQ. (R)
VR4509 5KB
CARRIER FREQ. (L)
VR4501 6.8KB
FM BPF
VR4550 10KB
QR4652 UN5213 (PAL:ON)
QR4651 UN5213 (PAL:ON)
TL4516
TL4519
TL4515
R CH
L CH
VCC
IC4501-50, 51, 52 REC/PLAY 0.2Vp-p (0.5msec. div.)
IC4501-54 REC/PLAY 0.1Vp-p (0.5msec. div.)
IC4501-62 REC 80mVp-p (0.5msec. div.)
IC4501-4, 5 REC 80mVp-p (0.5msec. div.)
IC4501-30 REC 0.2Vp-p (0.5msec. div.)
IC4501-28 PLAY 2.0Vp-p (10msec. div.)
IC4501-22 PLAY 0.1Vp-p (10μsec. div.)
IC4501-11, 12 REC 0.4Vp-p (0.5msec. div.)
IC4501-11, 12 PLAY 0.4Vp-p (0.5msec. div.)
IC4501-19 REC 0.2Vp-p (0.5msec. div.)
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

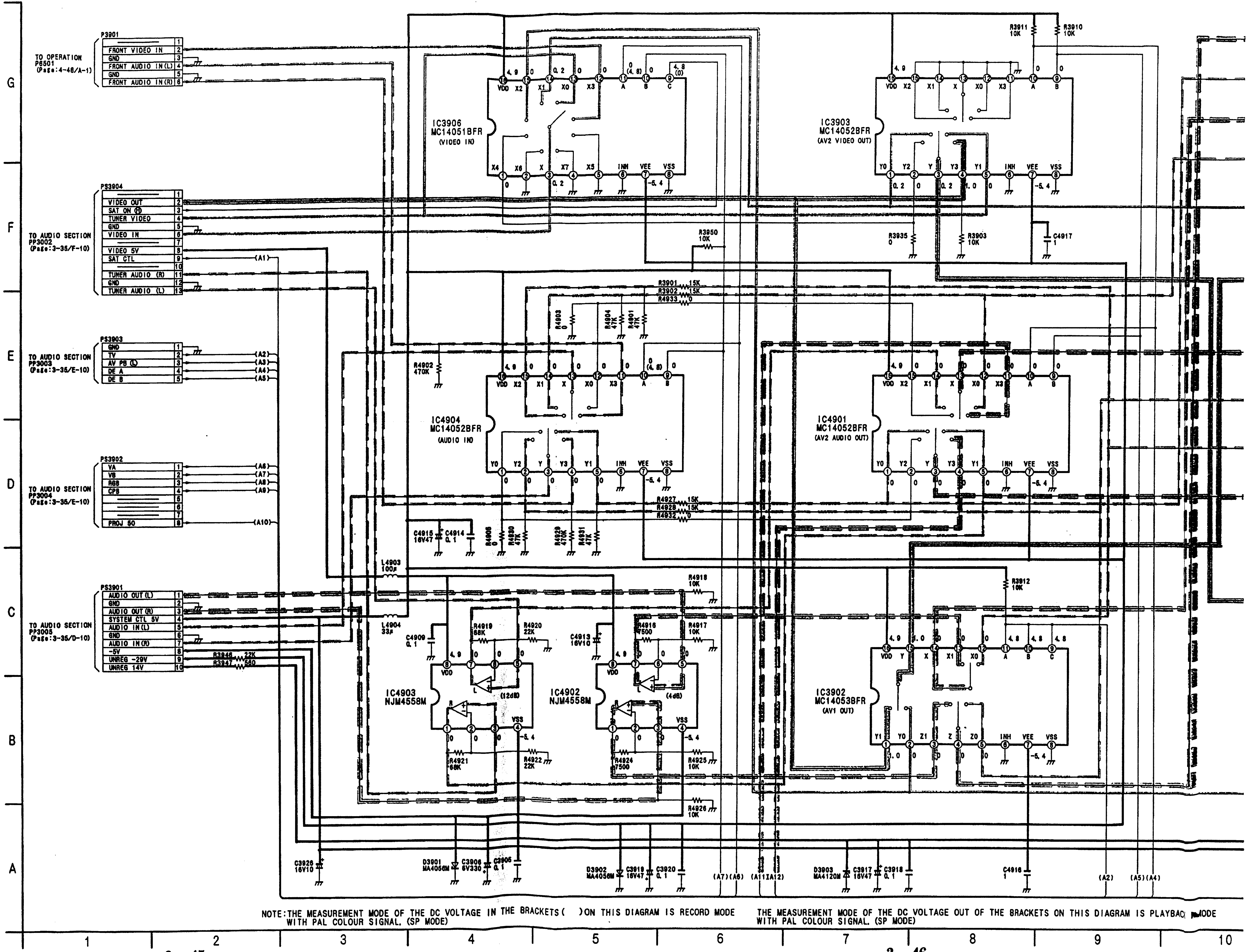
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE) ·LINE IN SIGNAL LEVEL...-10dB 1kHz

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE) ·LINE IN SIGNAL LEVEL...-10dB 1kHz

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART. PLEASE REFER TO PARTS LIST.

3-17. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

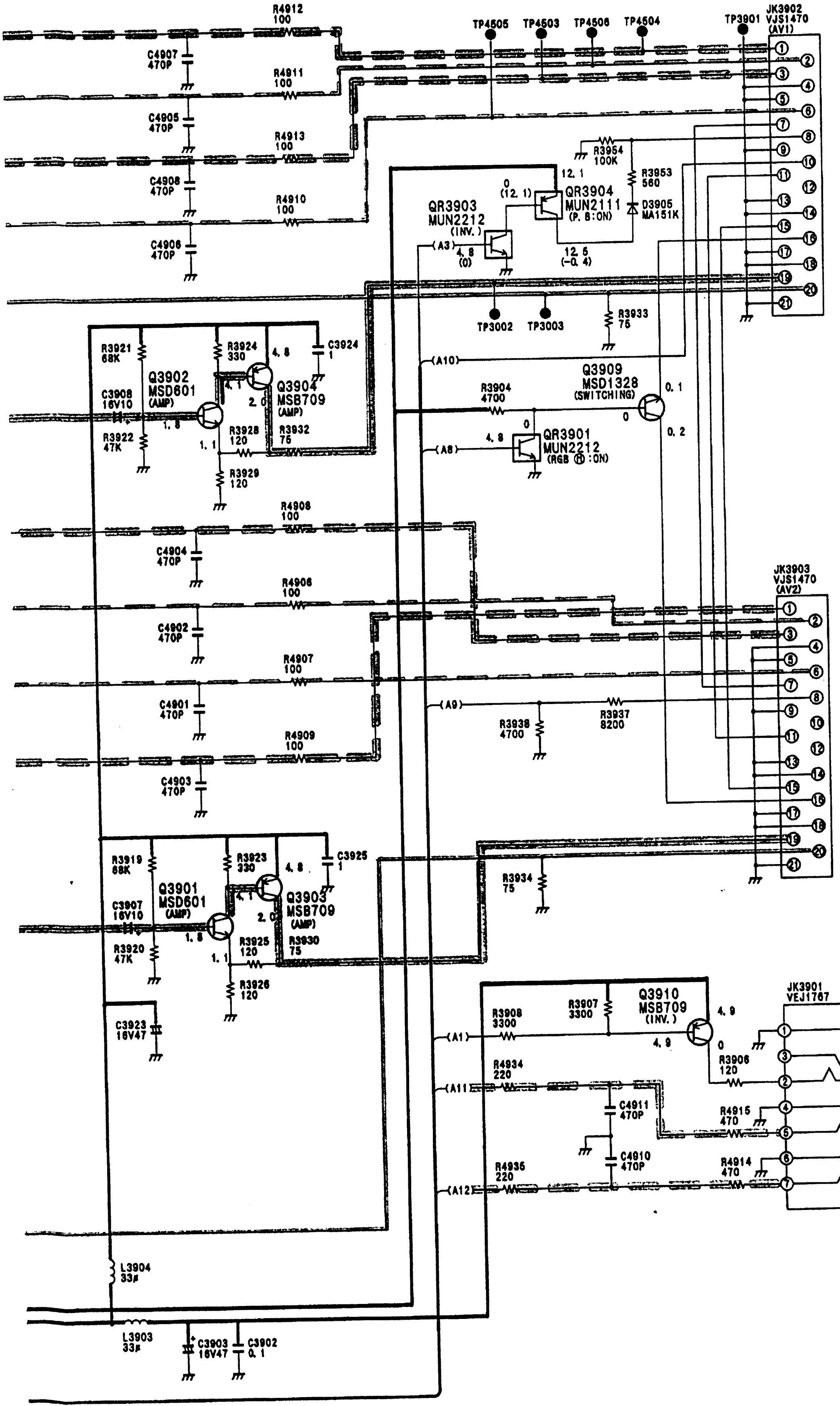


G
F
E
D
C
B
A
P3901
TO OPERATION P6501 (Page:4-48/A-1)
FRONT VIDEO IN
GND
FRONT AUDIO IN(L)
GND
FRONT AUDIO IN(R)
PS3904
TO AUDIO SECTION PP3002 (Page:3-35/F-10)
VIDEO OUT
SAT ON Ⓗ
TUNER VIDEO
GND
VIDEO IN
VIDEO 5V
SAT CTL
TUNER AUDIO (R)
GND
TUNER AUDIO (L)
PS3903
TO AUDIO SECTION PP3003 (Page:3-35/E-10)
GND
TV
AV PB Ⓛ
DE A
DE B
PS3902
TO AUDIO SECTION PP3004 (Page:3-35/E-10)
VA
VB
RGB
CPB
PROJ 50
PS3901
TO AUDIO SECTION PP3005 (Page:3-35/D-10)
AUDIO OUT(L)
GND
AUDIO OUT(R)
SYSTEM CTL 5V
AUDIO IN(L)
GND
AUDIO IN(R)
-5V
UNREG -29V
UNREG 14V
(A1)
(A2)
(A3)
(A4)
(A5)
(A6)
(A7)
(A8)
(A9)
(A10)
IC3906 MC14051BFR (VIDEO IN)
IC3903 MC14052BFR (AV2 VIDEO OUT)
IC4904 MC14052BFR (AUDIO IN)
IC4901 MC14052BFR (AV2 AUDIO OUT)
IC4903 NJM4558M
IC4902 NJM4558M
IC3902 MC14053BFR (AV1 OUT)
VDD
VSS
VEE
INH
R3911 10K
R3910 10K
R3950 10K
R3935 0
R3903 10K
C4917 1
R3901 15K
R3902 15K
R4933 0
R4903 0
R4904 47K
R4901 47K
R4902 470K
R4927 15K
R4928 15K
R4932 0
C4915 16V47
C4914 0.1
R4906 0
R4930 47K
R4929 470K
R4931 47K
L4903 100µ
L4904 33µ
R4918 10K
R3912 10K
C4909 0.1
R4919 68K
R4920 22K
C4913 16V10
R4916 7500
R4917 10K
(12dB)
(4dB)
R4921 68K
R4922 22K
R4924 7500
R4925 10K
R4926 10K
R3946 22K
R3947 560
C3926 16V10
D3901 MA4056M
C3906 6V330
C3905 0.1
D3902 MA4056M
C3919 16V47
C3920 0.1
D3903 MA4120M
C3917 16V47
C3918 0.1
C4916 1
(A7)(A6)
(A11)(A12)
(A2)
(A5)(A4)
1
2
3
4
5
6
7
8
9
10

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


R4912
100
C4907
470P
R4911
100
C4905
470P
R4913
100
C4908
470P
R4910
100
C4906
470P
TP4505
TP4503
TP4506
TP4504
TP3901
JK3902
VJS1470
(AV1)
R3954
100K
12. 1
R3953
560
0
(12. 1)
QR3904
MUN2111
(P. B:ON)
D3905
MA151K
QR3903
MUN2212
(INV.)
(A3)
4. 8
(0)
12. 5
(-0. 4)
TP3002
TP3003
R3933
75
R3921
68K
R3924
330
4. 8
C3924
1
Q3902
MSD601
(AMP)
Q3904
MSB709
(AMP)
C3908
16V10
4. 1
2. 0
1. 8
1. 1
R3922
47K
R3928
120
R3932
75
R3929
120
(A10)
Q3909
MSD1328
(SWITCHING)
R3904
4700
0. 1
0
0. 2
(A8)
4. 8
QR3901
MUN2212
(RGB Ⓗ:ON)
R4908
100
C4904
470P
R4906
100
C4902
470P
R4907
100
C4901
470P
R4909
100
C4903
470P
JK3903
VJS1470
(AV2)
(A9)
R3938
4700
R3937
8200
R3919
68K
R3923
330
4. 8
C3925
1
Q3901
MSD601
(AMP)
Q3903
MSB709
(AMP)
C3907
16V10
4. 1
2. 0
1. 8
1. 1
R3920
47K
R3925
120
R3930
75
R3926
120
R3934
75
C3923
16V47
Q3910
MSB709
(INV.)
R3908
3300
R3907
3300
4. 9
4. 9
0
(A1)
R3906
120
JK3901
VEJ1767
SAT-IR
R4934
220
(A11)
C4911
470P
R4915
470
AUDIO OUT
CH1 (L)
C4910
470P
R4935
220
(A12)
R4914
470
AUDIO OUT
CH2 (R)
L3904
33μ
L3903
33μ
C3903
16V47
C3902
0. 1

TV

1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (BLUE)
6	AUDIO IN CH1 (L)
7	BLUE
8	P. B +12V
9	GND (GREEN)
10	CONTROL
11	GREEN
12	———
13	GND (RED)
14	GND (BLANK)
15	RED
16	BLANKING
17	GND (V IN)
18	GND (V OUT)
19	VIDEO OUT
20	VIDEO IN
21	GND

DECODER/EXT

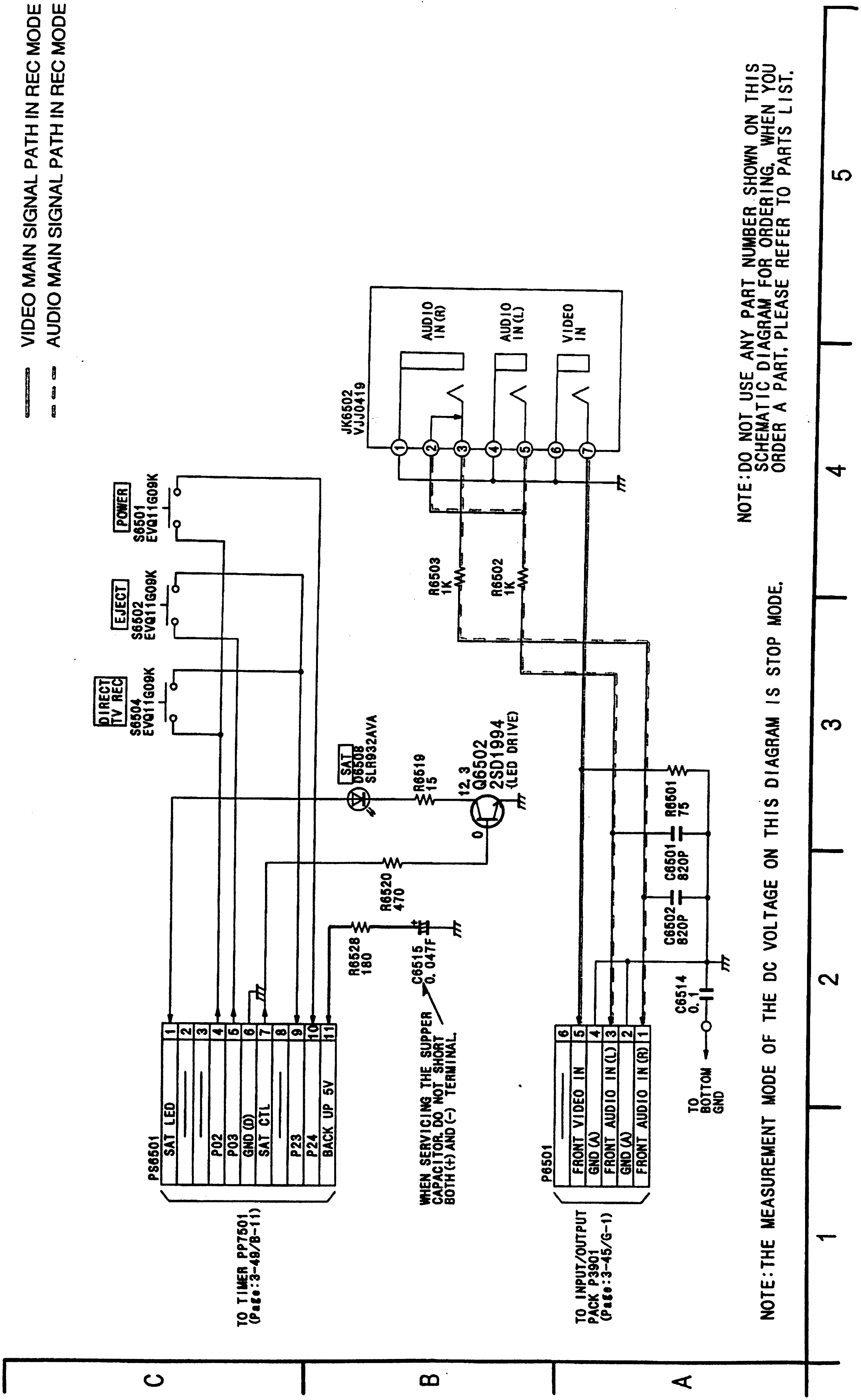
1	AUDIO OUT CH2 (R)
2	AUDIO IN CH2 (R)
3	AUDIO OUT CH1 (L)
4	GND (A)
5	GND (BLUE)
6	AUDIO IN CH1 (L)
7	BLUE
8	P. B +12V
9	GND (GREEN)
10	———
11	GREEN
12	———
13	GND (RED)
14	GND (BLANK)
15	RED
16	BLANKING
17	GND (V IN)
18	GND (V OUT)
19	VIDEO OUT
20	VIDEO IN
21	GND

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

11 12 13 14 15

3-18. OPERATION SCHEMATIC DIAGRAM

— VIDEO MAIN SIGNAL PATH IN REC MODE
- - AUDIO MAIN SIGNAL PATH IN REC MODE

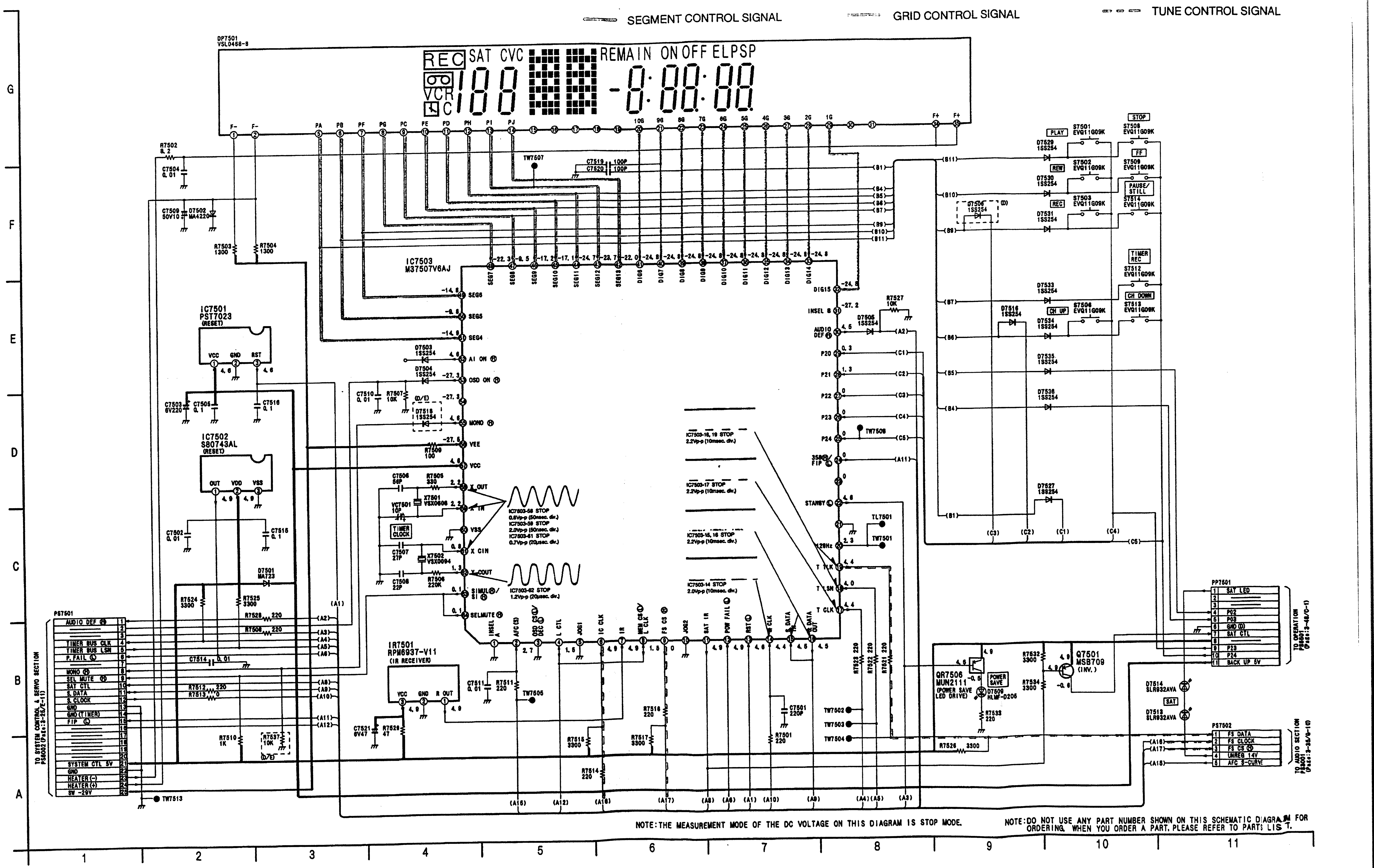


PS6501
1 SAT LED
2
3
4 P02
5 P03
6 GND (D)
7 SAT CTL
8
9 P23
10 P24
11 BACK UP 5V
TO TIMER PP7501 (Page:3-49/B-11)
S6504 EVQ11G09K
DIRECT TV REC
S6502 EVQ11G09K
EJECT
S6501 EVQ11G09K
POWER
SAT D6508 SLR932AVA
R6519 15
12.3
Q6502 2SD1994 (LED DRIVE)
0
R6520 470
R6528 180
C6515 0.047F
WHEN SERVICING THE SUPPER CAPACITOR, DO NOT SHORT BOTH (+) AND (-) TERMINAL.
P6501
6
5 FRONT VIDEO IN
4 GND (A)
3 FRONT AUDIO IN (L)
2 GND (A)
1 FRONT AUDIO IN (R)
TO INPUT/OUTPUT PACK P3901 (Page:3-45/G-1)
C6514 0.1
TO BOTTOM GND
C6502 820P
C6501 820P
R6501 75
R6502 1K
R6503 1K
JK6502 VJJ0419
1
2
3
4
5
6
7
AUDIO IN (R)
AUDIO IN (L)
VIDEO IN
A
B
C
1
2
3
4
5

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

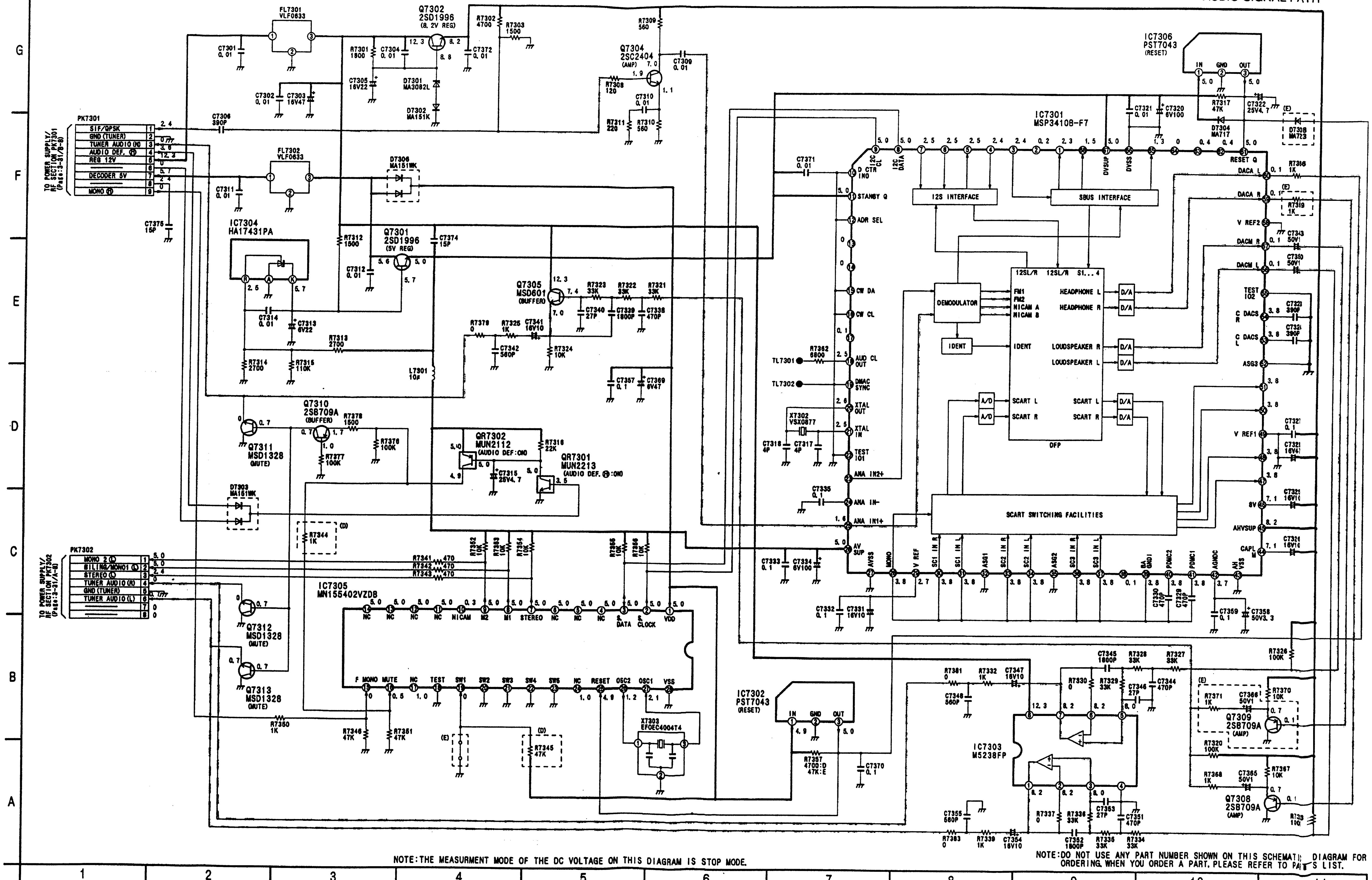
3-19. TIMER SCHEMATIC DIAGRAM


SEGMENT CONTROL SIGNAL
GRID CONTROL SIGNAL
TUNE CONTROL SIGNAL
DP7501
VSL0468-8
REC SAT CVC REMAIN ON OFF ELPSP
VCR
IC7503
M37507V6AJ
IC7501
PST7023
(RESET)
IC7502
S80743AL
(RESET)
IR7501
RPM6937-V11
(IR RECEIVER)
QR7506
MUN2111
(POWER SAVE LED DRIVE)
Q7501
MSB709
(INV.)
X7501
VSX0606
X7502
VSX0094
TIMER CLOCK
PLAY
REW
REC
STOP
FF
PAUSE/STILL
TIMER REC
CH DOWN
CH UP
S7501 EVQ11G09K
S7502 EVQ11G09K
S7503 EVQ11G09K
S7506 EVQ11G09K
S7508 EVQ11G09K
S7509 EVQ11G09K
S7512 EVQ11G09K
S7513 EVQ11G09K
S7514 EVQ11G09K
D7514 SLR932AVA
D7513 SLR932AVA
SAT
POWER SAVE
D7509 HLMP-0206
PS7501
AUDIO DEF
TIMER BUS CLK
TIMER BUS LSN
P. FAIL
MONO
SEL MUTE
SAT CTL
S. DATA
S. CLOCK
GND
GND (TIMER)
FIP
SYSTEM CTL 5V
HEATER (−)
HEATER (+)
SW -29V
TO SYSTEM CONTROL & SERVO SECTION
PP7501
SAT LED
P02
P03
GND (D)
SAT CTL
P23
P24
BACK UP 5V
TO OPERATION
PS7502
FS DATA
FS CLOCK
FS CS
UNREG 14V
AFC S-CURVE
TO AUDIO SECTION
SEG6
SEG5
SEG4
AI ON
OSD ON
MONO
VEE
VCC
X OUT
X IN
VSS
X CIN
X COUT
SIMUL/SI
SELMUTE
INSEL A
AFC
OSD CS/DEC
L CTL
JOG1
IC CLK
IR
MEM CS/L CLK
FS CS
JOG2
SAT IR
POW FAIL
RST
CLK
DATA
DATA OUT
T CLK
T LSN
T CLK
STANBY
P20
P21
P22
P23
P24
AUDIO DEF
INSEL B
DIGI5
IC7503-58 STOP 0.5Vp-p (50nsec. div.)
IC7503-59 STOP 2.0Vp-p (50nsec. div.)
IC7503-61 STOP 0.7Vp-p (20μsec. div.)
IC7503-62 STOP 1.2Vp-p (20μsec. div.)
IC7503-18, 19 STOP 2.2Vp-p (10msec. div.)
IC7503-17 STOP 2.2Vp-p (10msec. div.)
IC7503-15, 16 STOP 2.2Vp-p (10msec. div.)
IC7503-14 STOP 2.0Vp-p (10msec. div.)
TW7501
TW7502
TW7503
TW7504
TW7505
TW7506
TW7507
TW7513
TL7501
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

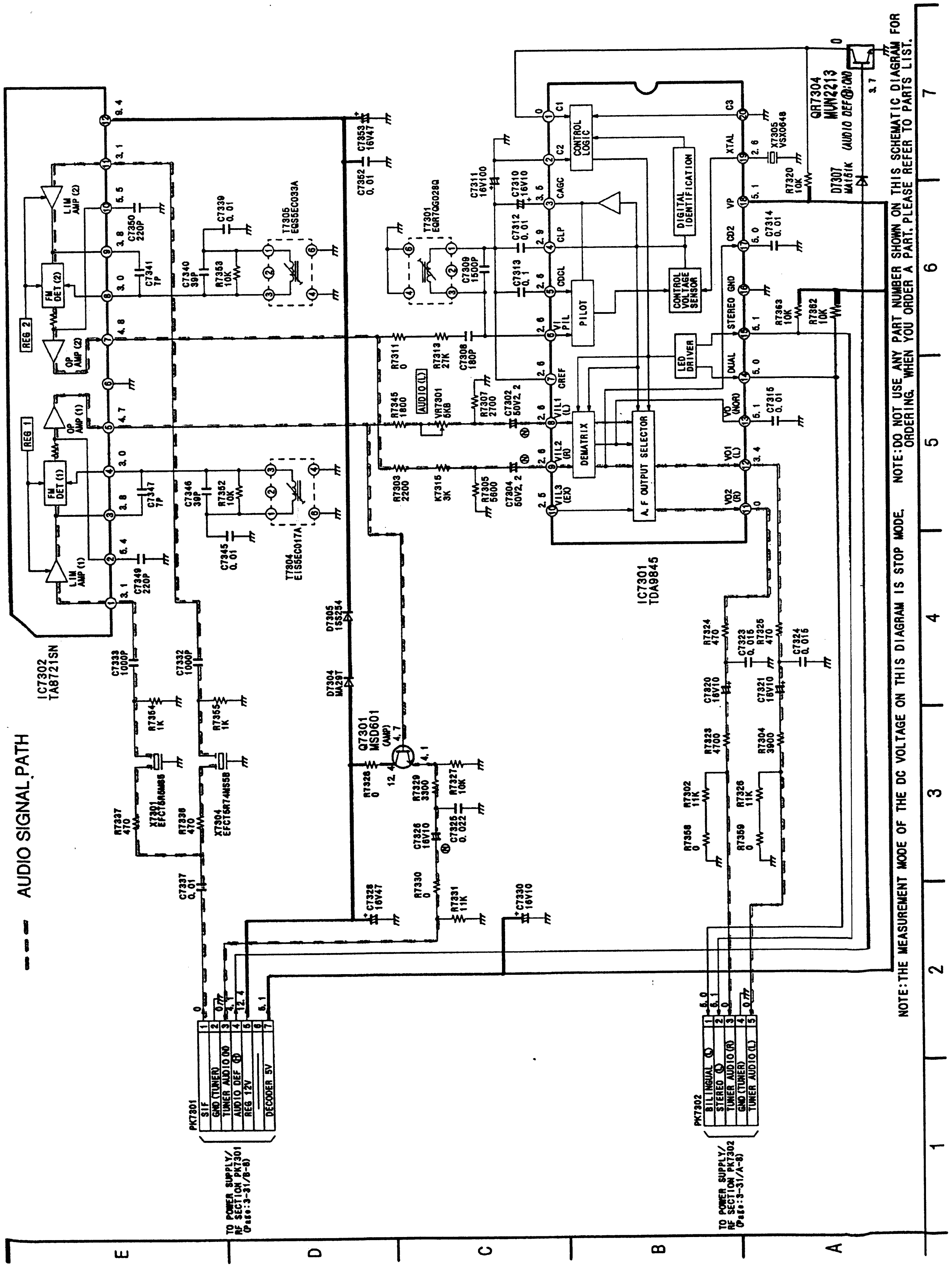
3-20. NICAM DECODER PACK SCHEMATIC DIAGRAM (NV-HD625B/EC)


AUDIO SIGNAL PATH
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
FL7301 VLF0633
Q7302 2SD1996 (8. 2V REG)
R7302 4700
R7303 1500
R7309 560
Q7304 2SC2404 (AMP)
C7309 0. 01
R7308 120
C7310 0. 01
R7311 220
R7310 560
C7301 0. 01
R7301 1800
C7304 0. 01
C7372 0. 01
C7305 16V22
D7301 MA3082L
D7302 MA151K
C7302 0. 01
C7303 16V47
C7306 390P
PK7301
SIF/QPSK
GND (TUNER)
TUNER AUDIO (R)
AUDIO DEF.
REG 12V
DECODER 5V
MONO
TO POWER SUPPLY/RF SECTION PK7301 (PAGE 3-21/B-8)
FL7302 VLF0633
D7306 MA151WK
C7311 0. 01
C7375 15P
IC7304 HA17431PA
R7312 1500
Q7301 2SD1996 (5V REG)
C7374 15P
C7312 0. 01
C7314 0. 01
C7313 6V22
R7313 2700
R7314 2700
R7315 110K
L7301 10µ
Q7305 MSD601 (BUFFER)
R7323 33K
R7322 33K
R7321 33K
C7340 27P
C7339 1800P
C7338 470P
R7379 0
R7325 1K
C7341 16V10
C7342 560P
R7324 10K
C7357 0. 1
C7369 6V47
Q7310 2SB709A (BUFFER)
R7378 1500
R7376 100K
R7377 100K
Q7311 MSD1328 (MUTE)
QR7302 MUN2112 (AUDIO DEF: ON)
R7316 22K
QR7301 MUN2213 (AUDIO DEF. : ON)
C7315 25V4. 7
D7303 MA151WK
R7344 1K
PK7302
MONO 2
BILING/MONO1
STEREO
TUNER AUDIO (R)
GND (TUNER)
TUNER AUDIO (L)
TO POWER SUPPLY/RF SECTION PK7302 (PAGE 3-21/A-8)
R7341 470
R7342 470
R7343 470
R7352 10K
R7353 10K
R7354 10K
R7355 10K
R7356 10K
IC7305 MN155402VZDB
NC NC NC NC NICAM M2 M1 STEREO NC NC NC S. DATA CLOCK VDD
F MONO MUTE NC TEST SW1 SW2 SW3 SW4 SW5 NC RESET OSC2 OSC1 VSS
X7303 EFOEC4004T4
Q7312 MSD1328 (MUTE)
Q7313 MSD1328 (MUTE)
R7350 1K
R7346 47K
R7351 47K
R7345 47K
IC7302 PST7043 (RESET)
IN GND OUT
R7357 4700:D 47K:E
C7370 0. 1
IC7306 PST7043 (RESET)
R7317 47K
C7322 25V4. 7
D7304 MA717
C7321 0. 01
C7320 6V100
D7305 MA723
IC7301 MSP3410B-F7
I2C CL
I2C DATA
DVSUP
DVSS
RESET Q
DACA L
DACA R
V REF2
DACM R
DACM L
TEST I02
C DACS R
C DACS L
ASG3
V REF1
8V
AHVSUP
CAPL M
D CTR I/O
STANBY Q
ADR SEL
CW DA
CW CL
AUD CL OUT
DMAC SYNC
XTAL OUT
XTAL IN
TEST I01
ANA IN2+
ANA IN-
ANA IN1+
AV SUP
AVSS
MONO
V REF
SC1 IN R
SC1 IN L
ASG1
SC2 IN R
SC2 IN L
ASG2
SC3 IN R
SC3 IN L
SA GND1
PDMC2
PDMC1
AGNDC
AH VSS
I2S INTERFACE
SBUS INTERFACE
DEMODULATOR
IDENT
FM1
FM2
NICAM A
NICAM B
I2SL/R
I2SL/R
S1...4
HEADPHONE L
HEADPHONE R
LOUDSPEAKER R
LOUDSPEAKER L
SCART L
SCART R
A/D
D/A
OFP
SCART SWITCHING FACILITIES
TL7301
TL7302
R7362 6800
X7302 VSX0877
C7318 4P
C7317 4P
C7335
C7371 0. 01
C7333 0. 1
C7334 6V100
C7332 0. 1
C7331 16V10
C7330 470P
C7329 470P
C7359 0. 1
C7358 50V3. 3
R7386 1K
R7319 1K
C7343 50V1
C7350 50V1
R7326 100K
C7345 1800P
R7328 33K
R7327 33K
R7381 0
R7332 1K
C7347 16V10
R7330 0
R7329 33K
C7346 27P
C7344 470P
C7348 560P
IC7303 M5238FP
C7355 560P
R7337 0
R7336 33K
C7353 27P
C7351 470P
R7383 0
R7339 1K
C7354 16V10
C7352 1800P
R7335 33K
R7334 33K
R7371 1K
C7366 50V1
R7370 10K
Q7309 2SB709A (AMP)
R7320 100K
R7368 1K
C7365 50V1
R7367 10K
Q7308 2SB709A (AMP)
R733 100
(E)
(D)

NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

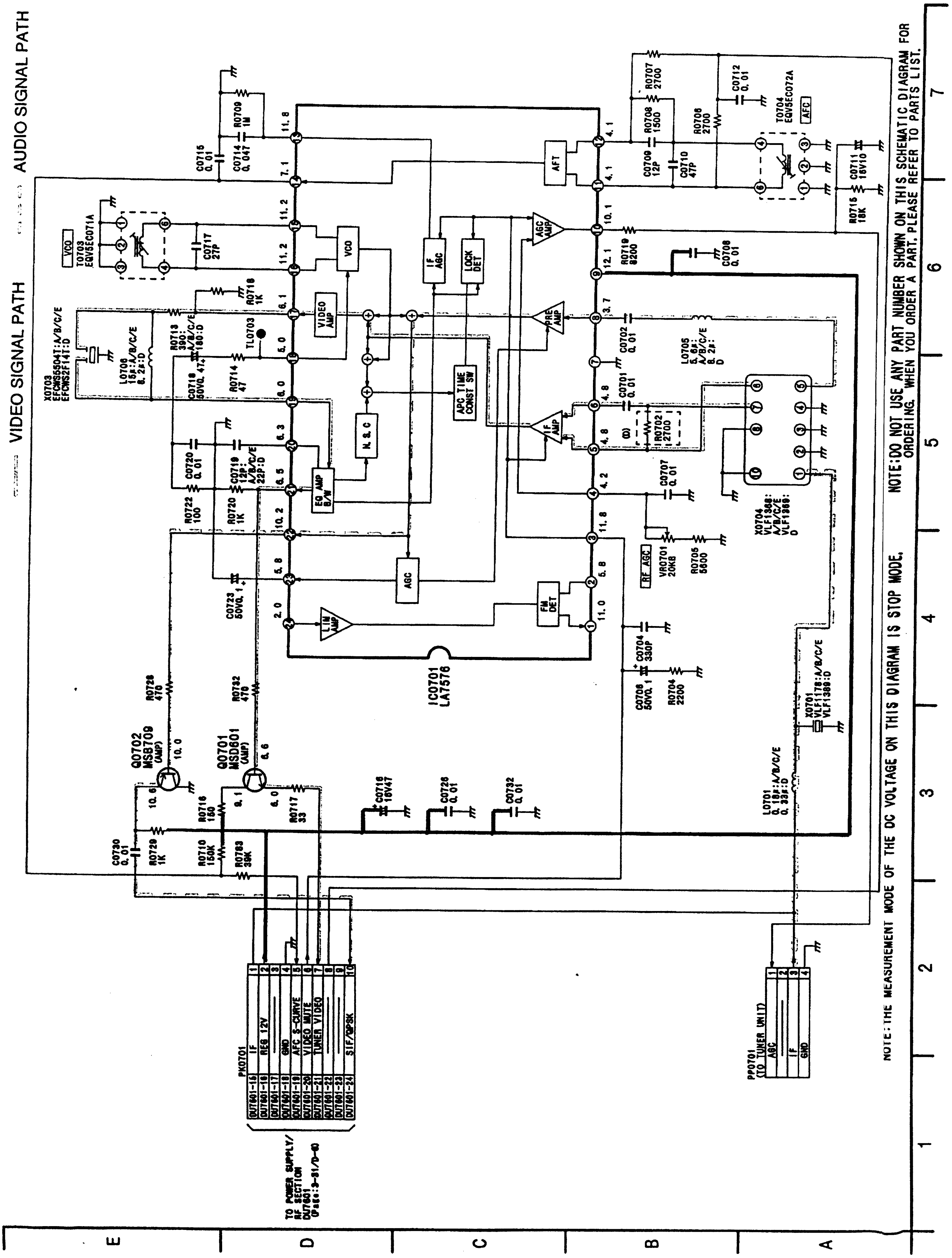
3-21. DECODER PACK SCHEMATIC DIAGRAM (NV-HD625EG/EGH/EGM)


AUDIO SIGNAL PATH
IC7302
TA8721SN
LIM AMP (1)
LIM AMP (2)
FM DET (1)
FM DET (2)
OP AMP (1)
OP AMP (2)
REG 1
REG 2
T7304
EIS5EC017A
T7305
EQS5EC033A
T7301
EQR7QG028Q
X7301
EFCT6R4MB5
X7304
EFCT6R74MS5B
Q7301
MSD601
(AMP)
D7304
MA29T
D7305
1SS254
IC7301
TDA9845
CONTROL LOGIC
DIGITAL IDENTIFICATION
CONTROL VOLTAGE SENSOR
PILOT
LED DRIVER
DEMATRIX
A.F OUTPUT SELECTOR
C1
C2
CAGC
CLP
CDCL
VI PIL
CREF
VIL1 (L)
VIL2 (R)
VIL3 (EX)
VO2 (R)
VO1 (L)
VO (NOR)
DUAL
STEREO GND
CD2
VP
XTAL
C3
X7305
VSX0648
QR7304
MUN2213
(AUDIO DEF ⊕:ON)
D7307
MA151K
AUDIO (L)
VR7301
5K6
PK7301
SIF
GND (TUNER)
TUNER AUDIO (M)
AUDIO DEF ⊕
REG 12V
DECODER 5V
TO POWER SUPPLY/ RF SECTION PK7301 (Page:3-31/B-8)
PK7302
BILINGUAL ⊖
STEREO ⊖
TUNER AUDIO (R)
GND (TUNER)
TUNER AUDIO (L)
TO POWER SUPPLY/ RF SECTION PK7302 (Page:3-31/A-8)
A
B
C
D
E
1
2
3
4
5
6
7

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

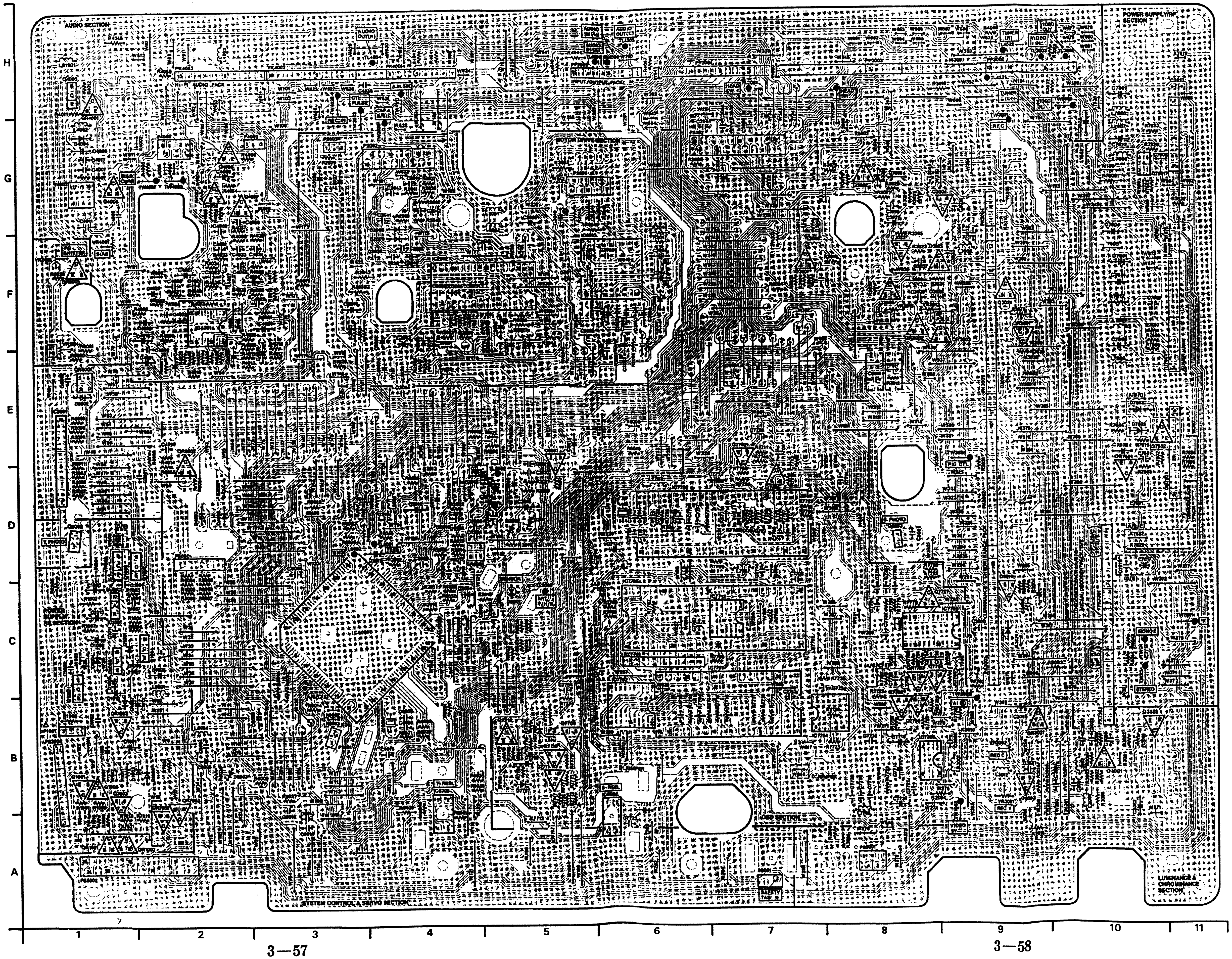
3-22. TV DEMODULATOR PACK SCHEMATIC DIAGRAM


AUDIO SIGNAL PATH
VIDEO SIGNAL PATH
IC0701
LA7576
VCO
T0703
EQV5EC071A
AFT
AGC AMP
IF AGC
LOCK DET
VIDEO AMP
PRE AMP
APC TIME CONST SW
N.S.C
IF AMP
EQ AMP B/W
AGC
FM DET
LIM AMP
RF AGC
VR0701 20K B
AFC
T0704
EQV5EC072A
X0703
EFCW5504T:A/B/C/E
EFCWS2F14T:D
X0704
VLF1368:A/B/C/E
VLF1369:D
X0701
VLF1176:A/B/C/E
VLF1369:D
L0701
Q0702
MSB709
(AMP)
Q0701
MSD601
(AMP)
PK0701
DU7601-15 1 IF
DU7601-16 2 REG 12V
DU7601-17 3
DU7601-18 4 GND
DU7601-19 5 AFC S-CURVE
DU7601-20 6 VIDEO MUTE
DU7601-21 7 TUNER VIDEO
DU7601-22 8
DU7601-23 9
DU7601-24 10 SIF/QPSK
TO POWER SUPPLY/RF SECTION DU7601 (Page:3-51/D-6)
PP0701 (TO TUNER UNIT)
1 AGC
2
3 IF
4 GND
A
B
C
D
E
1
2
3
4
5
6
7

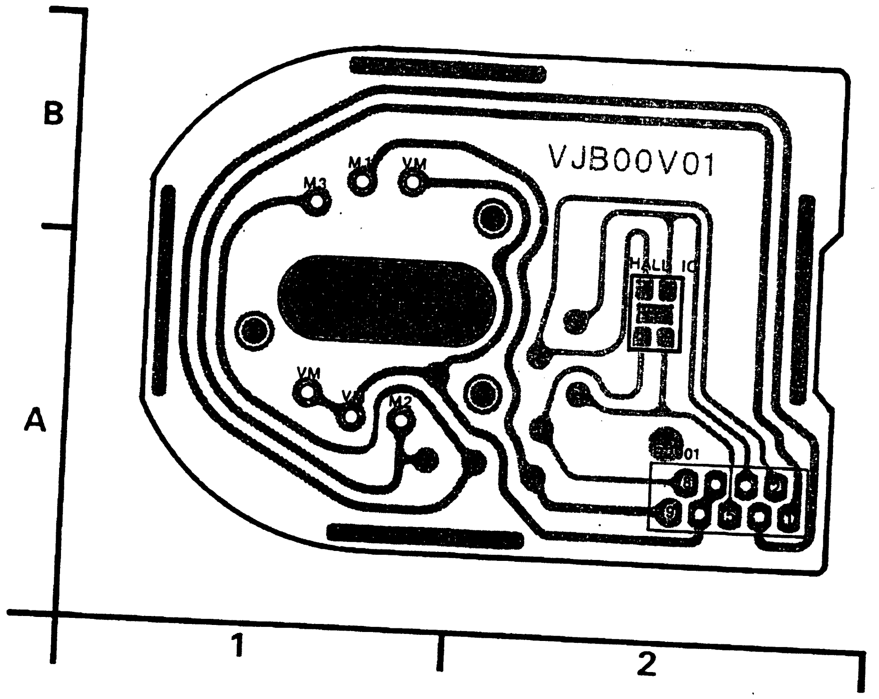
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

3-25. MAIN C.B.A. (VEP06B97F: NV-HD625EG/EGH) (VEP06C38C: NV-HD625EGM) (VEP06B97G: NV-HD625B) (VEP06B97H: NV-HD625EC)


AUDIO SECTION
POWER SUPPLY/RF SECTION
LUMINANCE & CHROMINANCE SECTION
SYSTEM CONTROL & SERVO SECTION
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

3-24. CYLINDER STATOR UNIT (VEK7236)



CYLINDER STATOR UNIT	
Integrated Circuit	
HALL IC	A-2
Connector	
P2901	A-2

ADDRESS INFORMATION

MAIN C.B.A.									
Transistor				**Integrated Circuit**				**Connector**	
Q1001	B-1	Q7603	B-1	IC1001	C-1	TL4522	H-9	P2001	B-3
Q1002	D-2	Q7702	E-7	IC2001	E-1	TL6001	D-4	P2002	G-4
Q1003	C-1	Q7704	C-8	IC2002	F-4	TL6002	D-3	P2003	G-3
Q1004	C-2	Q7705	D-7	IC2003	F-6	TW23	C-10	P2005	G-5
Q1005	B-1	Q7706	B-8	IC4001	F-2	TW24	C-10	P3002	G-7
Q1006	D-1	Q7707	C-8	IC6001	C-3	TW1003	A-9	P4002	G-2
Q1007	C-1	Q7708	B-8	IC6002	A-6	TW2001	H-8	P4003	G-3
Q3001	B-10	Q7709	B-5	IC6003	B-4	TW2002	H-3	P6001	D-2
Q3002	G-8	Q7710	B-5	IC7701	C-7	TW2026	G-4	DU7601	D-11
Q3003	B-9	Q7711	B-5	IC7702	B-6	TW3001	G-9	PK3001	C-9
Q3004	G-9	Q7712	B-5	IC7703	B-8	TW3003	H-10	PK3002	D-9
Q3005	F-9	**Transistor & Resistor**		IC7704	B-8	TW3026	B-9	PK3003	E-9
Q3006	F-8	QR1001	A-1	IC7705	C-8	TW3035	E-9	PK3004	G-9
Q3007	F-7	QR1002	A-1	IC7706	C-6	TW4002	G-2	PK4001	H-4
Q3010	C-9	QR1003	B-1	IC7708	D-6	TW4003	G-2	PK4002	H-3
Q3023	F-8	QR3001	F-9	IC7712	C-7	TW4028	H-3	PK4003	H-2
Q3024	F-9	QR3002	F-8	**Test Point**		TW4511	H-4	PK7301	C-10
Q3025	B-10	QR3003	F-9	TL2001	H-7	TW7601	C-11	PK7302	B-10
Q4005	H-1	QR3027	B-9	TL2002	D-5	**Adjustment**		PP3002	H-9
Q4006	G-1	QR4001	H-1	TL2009	C-5	VR2001	F-1	PP3003	H-8
Q4007	G-2	QR6001	E-1	TL3002	H-10	VR3001	B-9	PP3004	H-7
Q4008	G-2	QR6002	E-2	TL3003	H-9	VR3002	B-9	PP3005	H-5
Q4009	G-2	QR6004	D-4	TL4503	H-6	VR3012	F-9	PS3001	A-8
Q6001	E-5	QR6005	F-1	TL4504	H-4	VR3013	F-8	PS3006	B-1
Q6002	D-1	QR7601	D-10	TL4505	H-6	VR3014	E-1	PS6002	A-1
Q6003	D-8	QR7602	A-2	TL4506	H-6	VR4001	F-1	TU7601	E-11
Q7601	G-10	QR7603	B-2	TL4521	H-9				
Q7602	E-10	QR7703	C-8						

ADDRESS INFORMATION

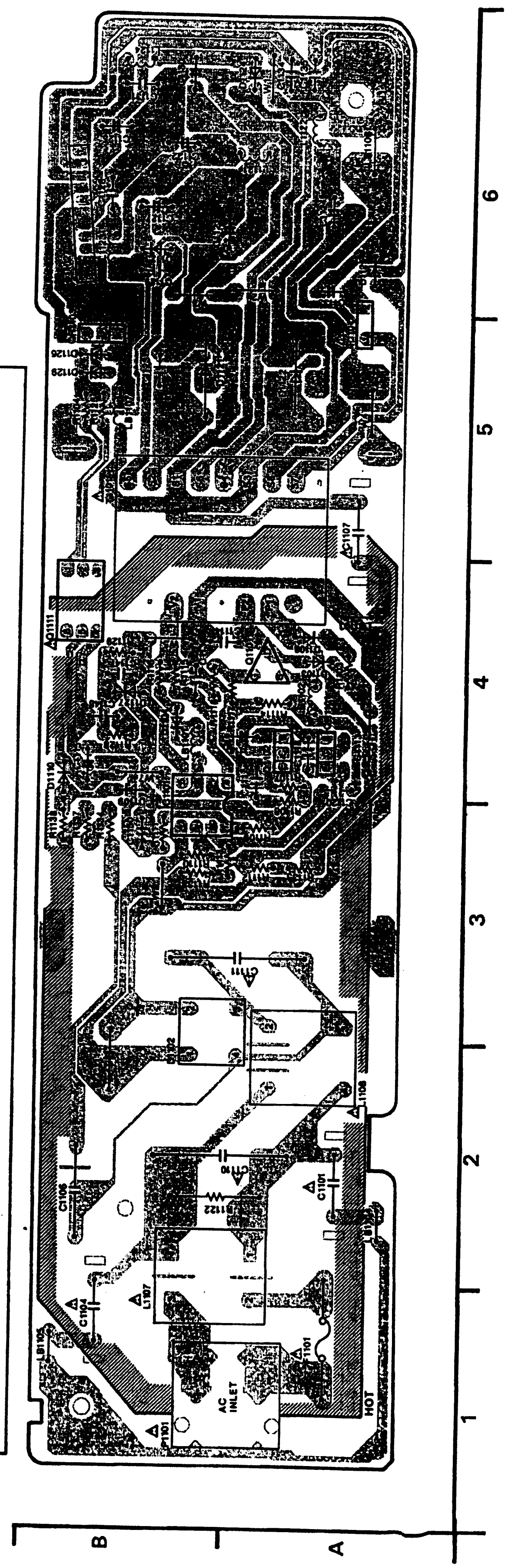
3-23. POWER C.B.A. (VEP01763C)

POWER C.B.A.	
Transistor	
Q1101	A-4
Q1102	A-4
Q1111	B-4
Transistor & Resistor	
QR1101	A-4
QR1103	B-5
Integrated Circuit	
IC1101	B-3
Connector	
P1101	B-1
P1102	B-6

ADDRESS INFORMATION

CAUTION

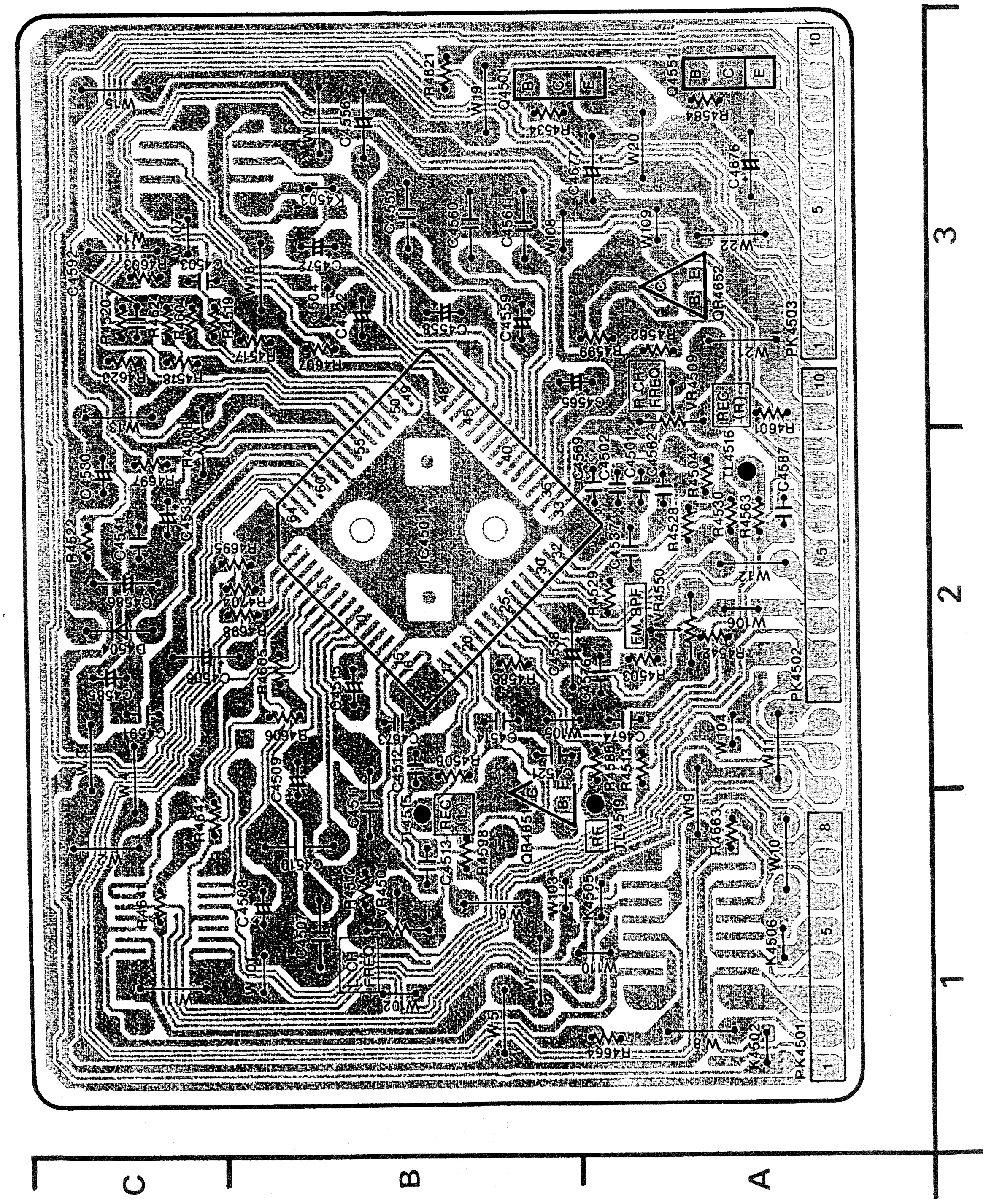
THE RED MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.



3-28. Hi-Fi AUDIO PACK C.B.A. (VEP04664B)

Hi-Fi AUDIO PACK C.B.A.	
Transistor	
Q4501	B-3
Q4551	A-3
Transistor & Resistor	
QR4651	B-1
QR4652	A-3
Integrated Circuit	
IC4501	B-2
Test Point	
TL4515	B-1
TL4516	A-2
TL4519	A-1
Adjustment	
VR4501	B-1
VR4509	A-3
VR4550	A-2
Connector	
PK4501	A-1
PK4502	A-2
PL4503	A-3

ADDRESS INFORMATION

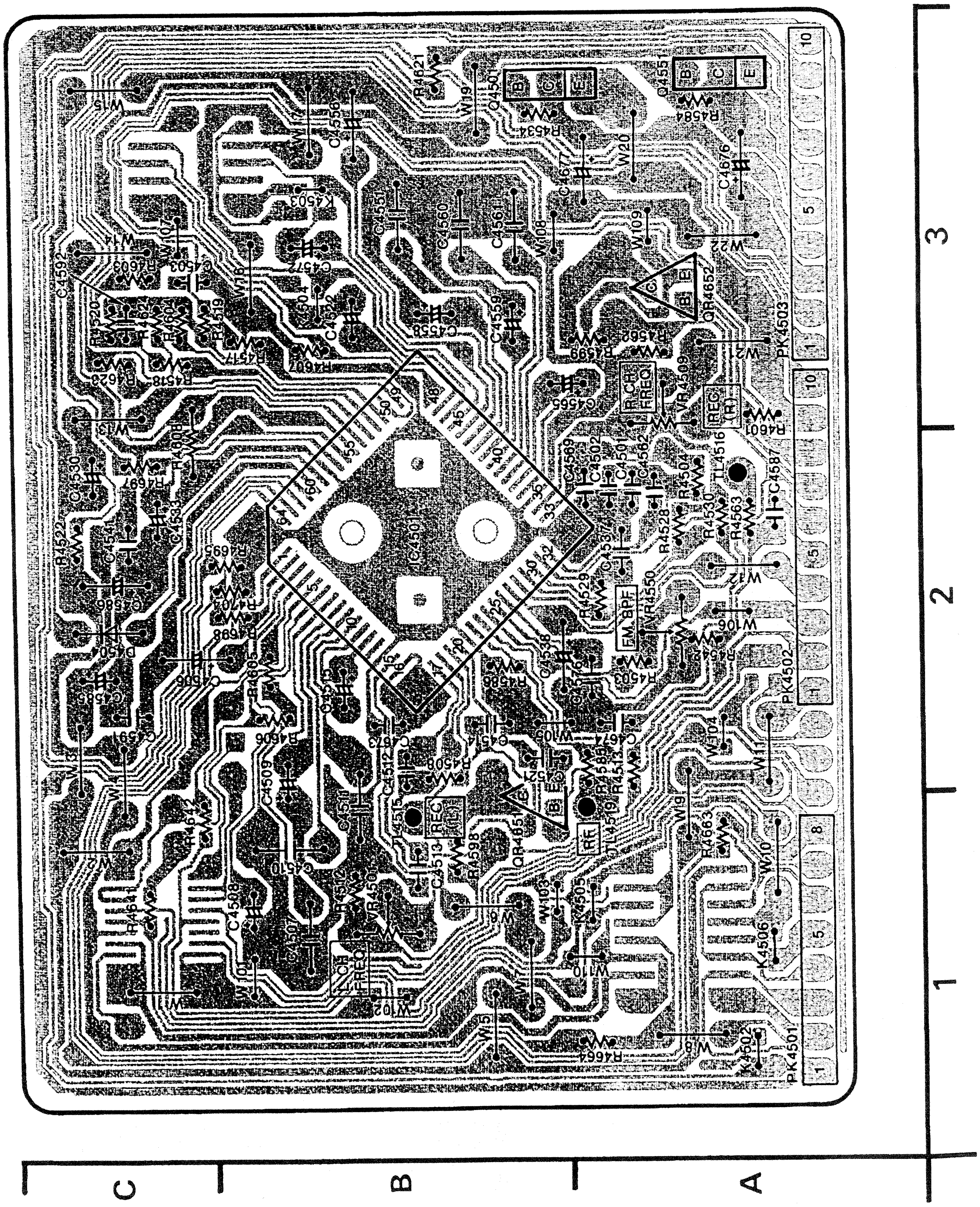


1
2
3
A
B
C
IC4501
Q4501
Q4551
QR4651
QR4652
PK4501
PK4502
PL4503
VR4501
VR4509
VR4550
TL4515
TL4516
TL4519
L-CH FREQ
R-CH FREQ
FM BPF
REC (L)
REC (R)
RF

3-28. Hi-Fi AUDIO PACK C.B.A. (VEP04664B)

Hi-Fi AUDIO PACK C.B.A.	
Transistor	
Q4501	B-3
Q4551	A-3
Transistor & Resistor	
QR4651	B-1
QR4652	A-3
Integrated Circuit	
IC4501	B-2
Test Point	
TL4515	B-1
TL4516	A-2
TL4519	A-1
Adjustment	
VR4501	B-1
VR4509	A-3
VR4550	A-2
Connector	
PK4501	A-1
PK4502	A-2
PL4503	A-3

ADDRESS INFORMATION



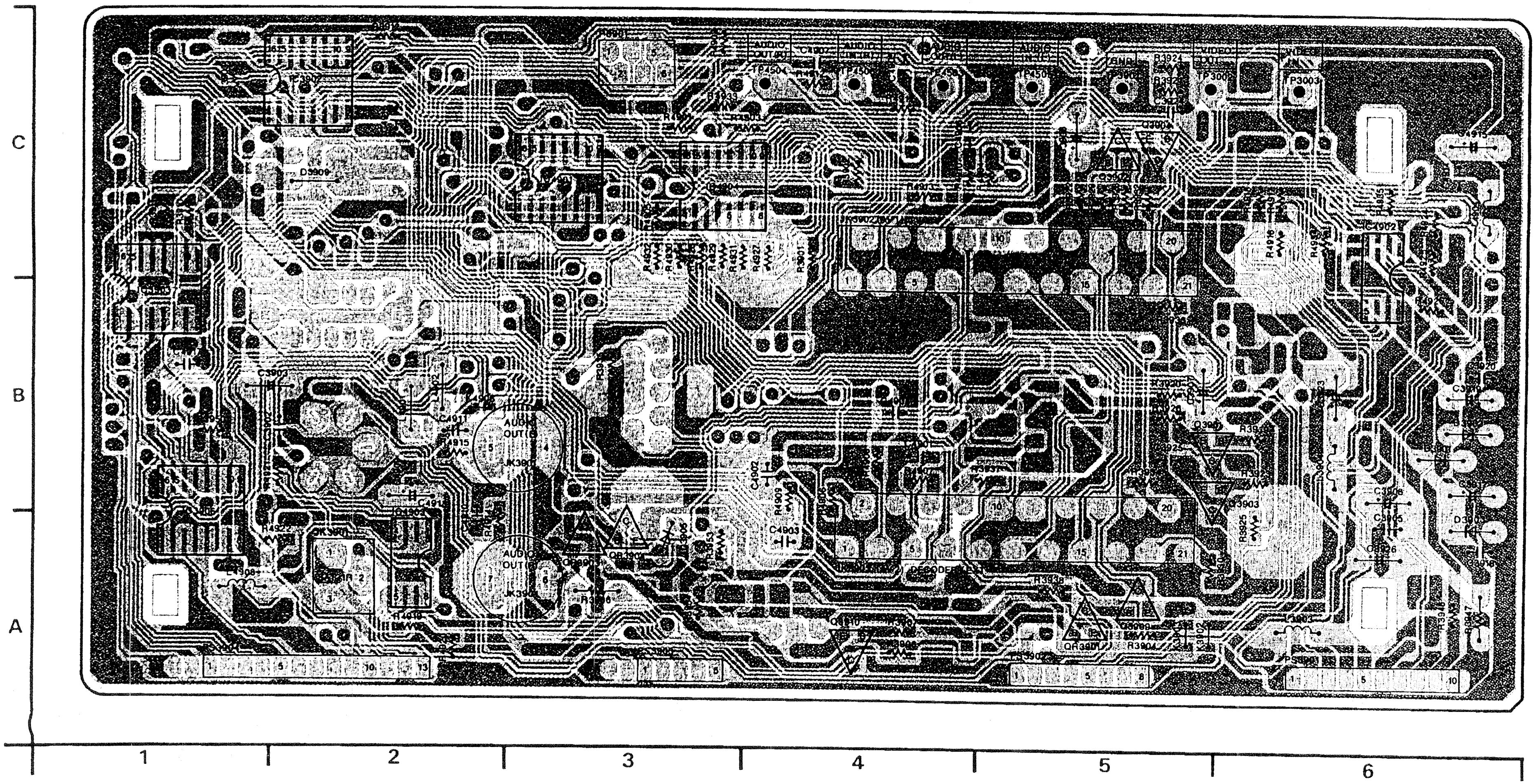
IC4501
Q4501
Q4551
QR4651
QR4652
VR4501
VR4509
VR4550
TL4515
TL4516
TL4519
PK4501
PK4502
PK4503
REC (L)
REC (R)
L-CH FREQ
R-CH FREQ
FM BPF
1
2
3
A
B
C

3-29. INPUT/OUTPUT PACK C.B.A. (VEP03D96D)

INPUT/OUTPUT PACK C.B.A.

Transistor		Integrated Circuit		Test Point		Connector	
Q3901	B-5	IC3902	C-2	TP3002	C-5	P3901	C-3
Q3902	C-5	IC3903	B-1	TP3003	C-6	PS3901	A-6
Q3903	B-5	IC3906	A-1	TP3901	C-5	PS3902	A-5
Q3904	C-5	IC4901	C-3	TP4503	C-4	PS3903	A-3
Q3909	A-5	IC4902	C-6	TP4504	C-4	PS3904	A-1
Q3910	A-4	IC4903	A-2	TP4505	C-5		
Transistor & Resistor		IC4904	C-3	TP4506	C-4		
QR3901	A-5						
QR3903	A-3						
QR3904	A-3						

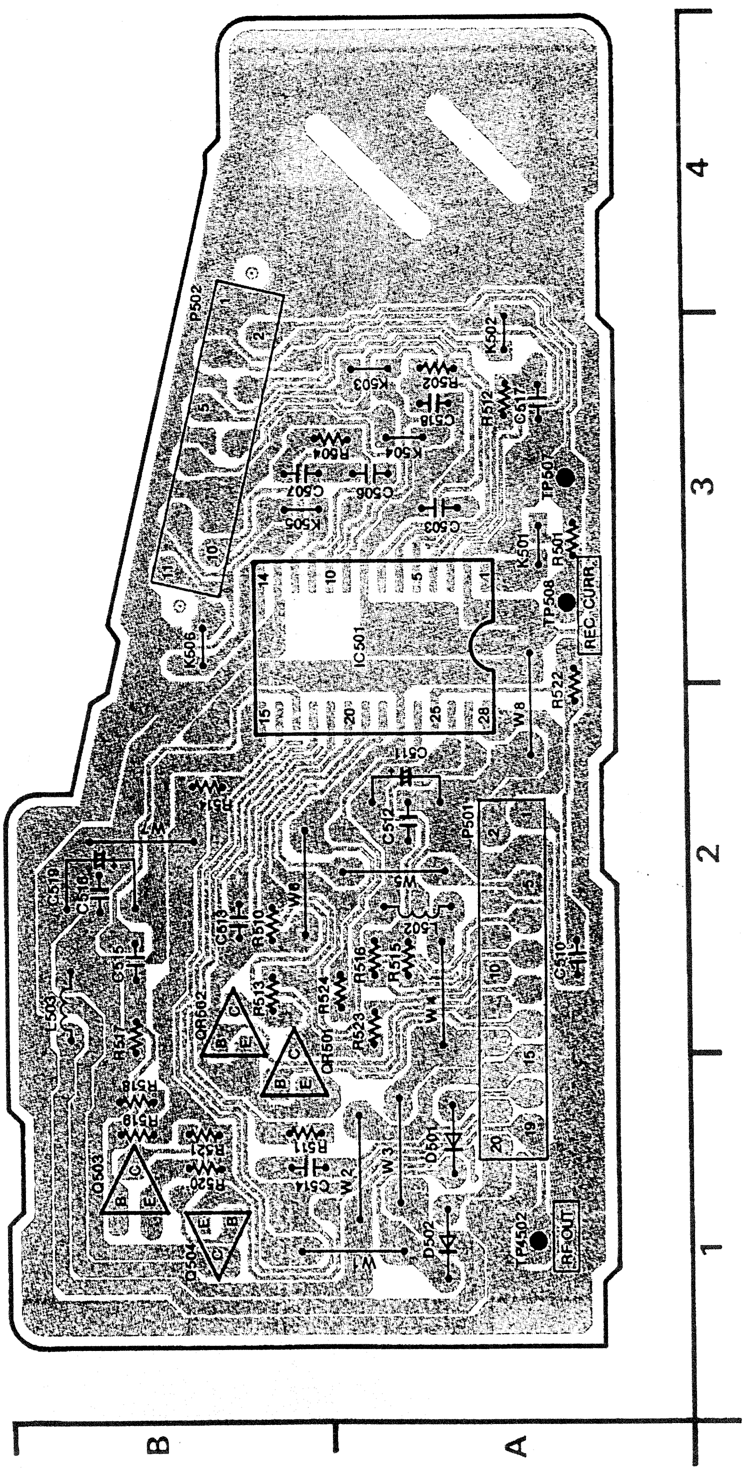
ADDRESS INFORMATION



3-30. HEAD AMP C.B.A. (VEP05349A)

HEAD AMP C.B.A.	
Transistor	
Q503	B-1
Q504	B-1
Transistor & Resistor	
QR501	B-1
QR502	B-2
Integrated Circuit	
IC501	A-3
Test Point	
TP507	A-3
TP508	A-3
TP4502	A-1
Connector	
P501	A-2
P502	B-3

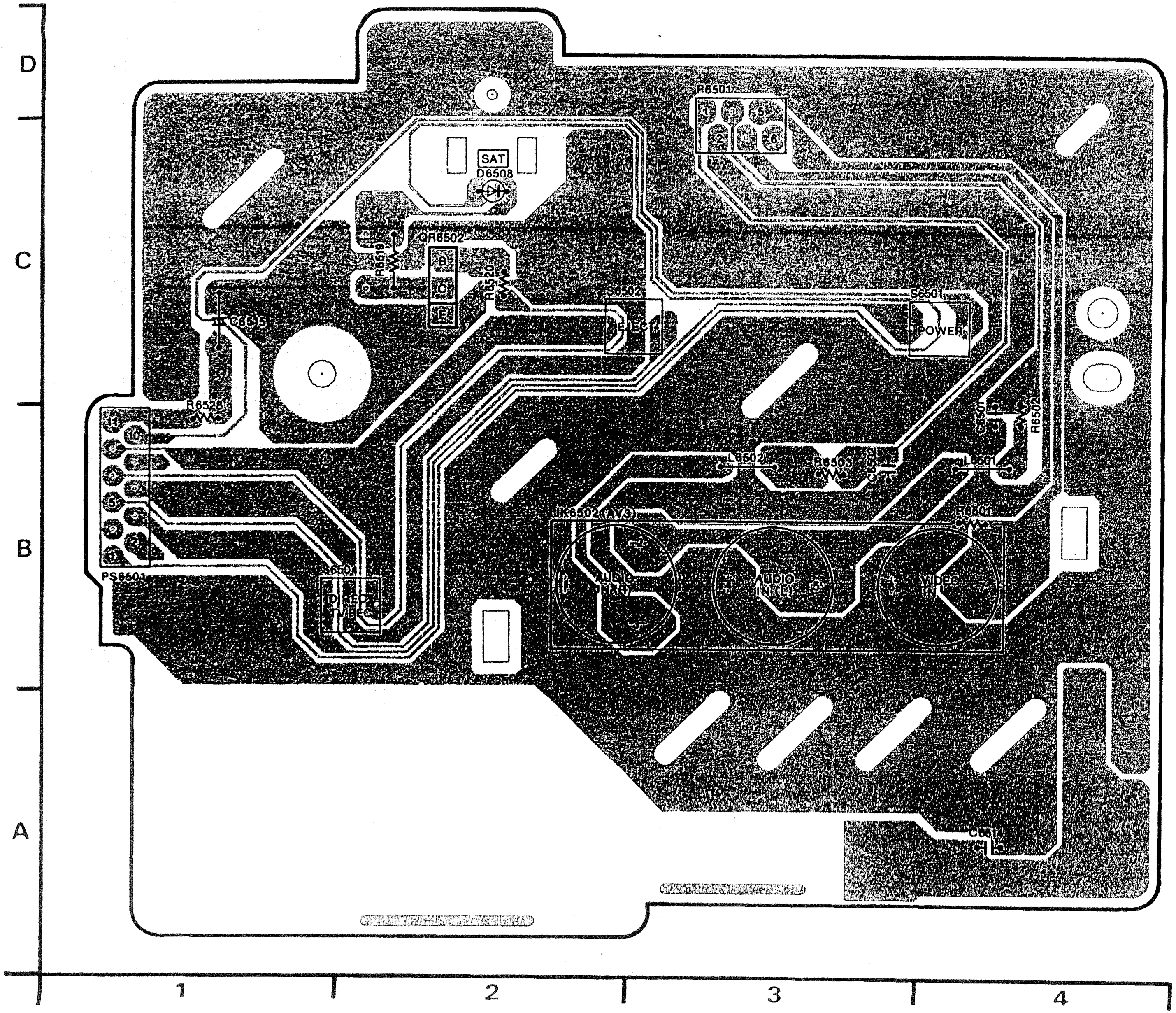
ADDRESS INFORMATION


P502
1
2
5
10
11
K506
IC501
14
10
5
15
20
25
28
K505
C507
C506
R504
K504
C503
C518
R502
K503
K502
R512
C517
TP507
K501
R501
TP508
REC. CURR.
R522
W8
C511
C512
P501
1
2
5
10
15
19
20
C510
W5
L502
W6
R510
C513
R516
R515
R524
R523
W4
R513
QR502
QR501
B
C
E
C519
C516
C515
L503
R517
R518
R519
R521
R520
R511
C514
W2
W3
D501
D502
W1
Q503
Q504
TP4502
RF OUT
W7
R514
4
3
2
1
B
A

3-31. OPERATION C B A (VEP06B98B)

OPERATION C.B.A.	
Transistor	
Q6502	C-2
Connector	
P6501	D-3
PS6501	B-1

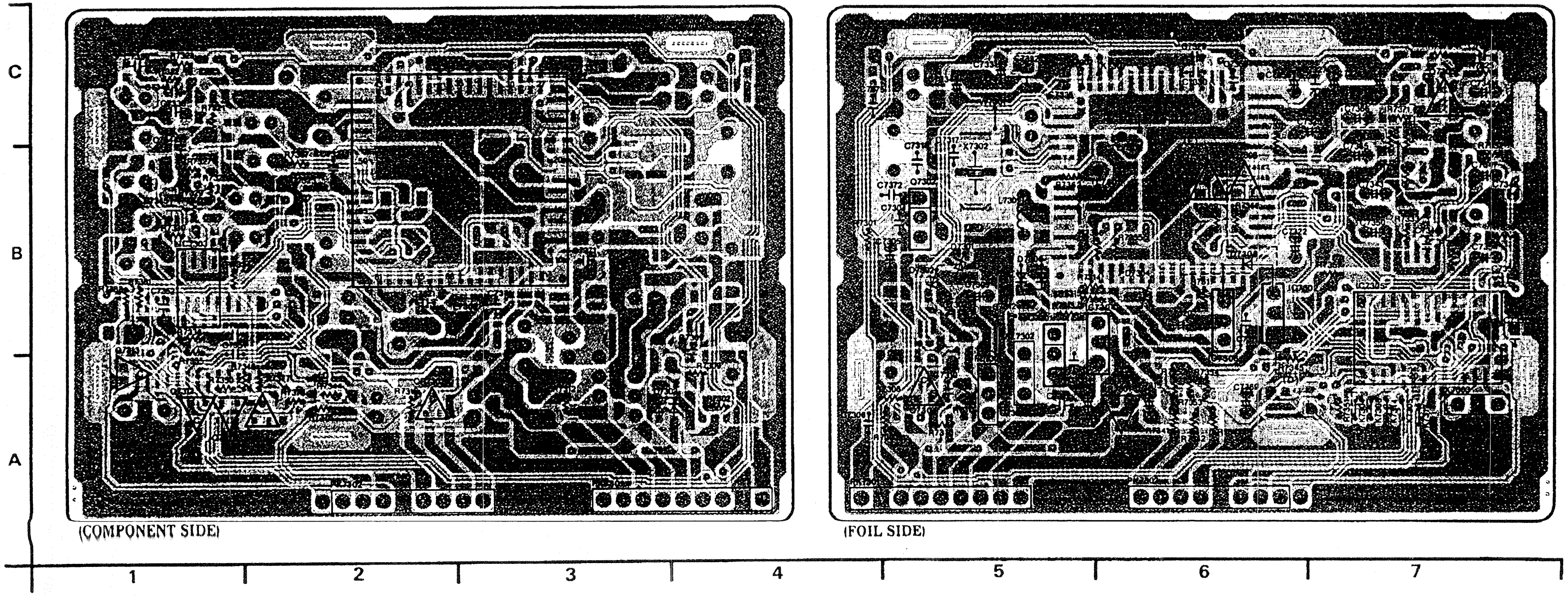
ADDRESS INFORMATION


P6501
SAT
D6508
QR6502
R6519
R6520
S6502
EJECT
S6501
POWER
C6515
R6528
PS6501
S6504
DIRECT TV/REC
JK6502 (AV3)
AUDIO IN (R)
AUDIO IN (L)
VIDEO IN
L6502
R6503
C6503
L6501
C6501
R6502
R6501
C651
A
B
C
D
1
2
3
4

3-32. NICAM DECODER PACK C B A (VEP07787Q: NV-HD625B) (VEP07787P: NV-HD625EC)

NICAM DECODER PACK C.B.A.	
Transistor	
Q7301	B-5
Q7302	B-5
Q7304	A-5
Q7305	C-7
Q7308	B-6
Q7309	B-6
Q7310	A-2
Q7311	A-1
Q7312	A-1
Q7313	A-1
Transistor & Resistor	
QR7301	A-6
QR7302	A-2
Integrated Circuit	
IC7301	C-2
IC7302	B-6
IC7303	B-1
IC7304	B-6
IC7305	B-7
IC7306	B-6
Test Point	
TL7301	B-6
TL7302	C-6
Connector	
PK7301	A-3
PK7301	A-5
PK7302	A-2
PK7302	A-6

ADDRESS INFORMATION

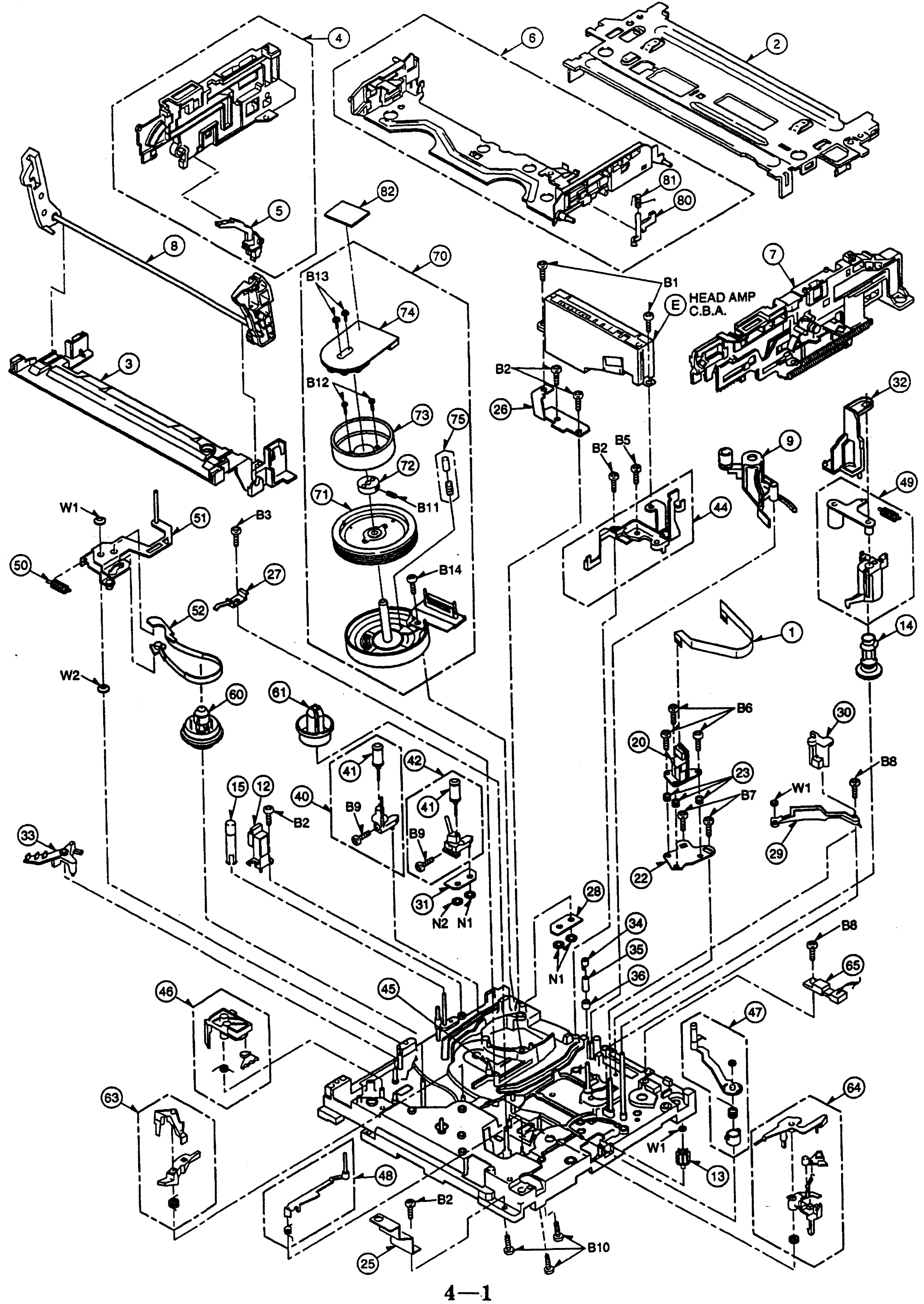

(COMPONENT SIDE)

(FOIL SIDE)

SECTION 4
EXPLODED VIEWS & PARTS LIST

4-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST

❶ CHASSIS PARTS SECTION (1)

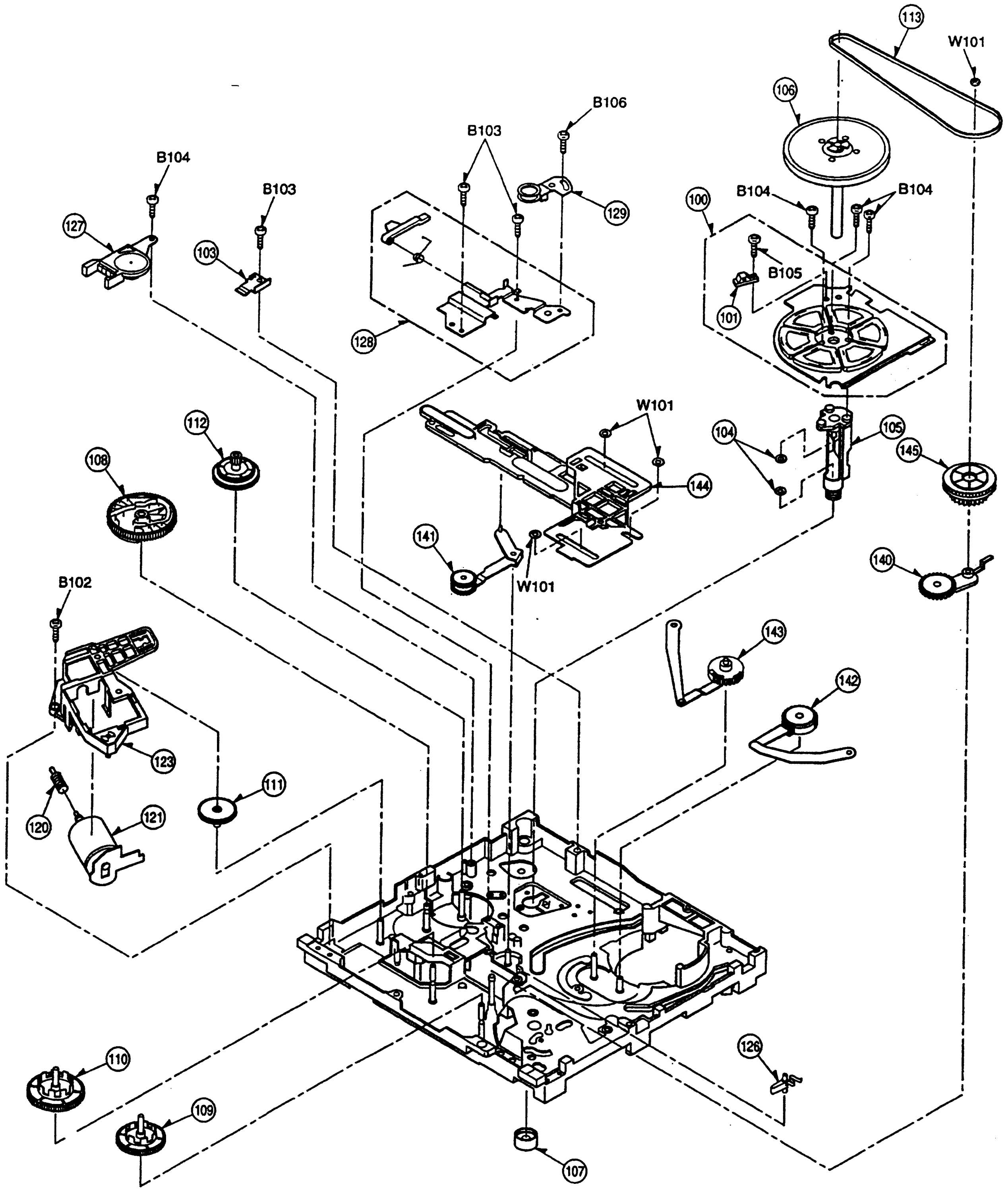


Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1 (1)	VWJ0743	FLEXIBLE CABLE (6P)	1	P4002-A/C HEAD
2 (1)	VMA8644	TOP PLATE	1	
3 (1)	VMA8787	CASSETTE GUIDE	1	
4 (1)	VXA4660	SIDE PLATE (L) UNIT	1	
5 (1)	VXL2250	OPENER LEVER UNIT	1	
6 (1)	VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7 (1)	VXA4806	SIDE PLATE (R) UNIT	1	
8 (1)	VXP1339	MAIN SHAFT UNIT	1	
9 (1)	VXL2440	CLEANER ARM UNIT	1	
12 (1)	VBS0052	FE HEAD	1	
13 (1)	VDG0871	CARRIAGE CONNECTION GEAR	1	
14 (1)	VDG0886	PINCH CAM GEAR	1	
15 (1)	VXP1402	IMPEDANCE ROLLER UNIT	1	
20 (1)	VED0217	A/C HEAD (1) UNIT	1	
22 (1)	VMA8624	A/C HEAD BASE	1	
23 (1)	VMB2515	A/C HEAD SPRING	3	
25 (1)	VMA8761	MOUNT ANGLE	1	
26 (1)	VMA9158	HEAD AMP MOUNT ANGLE (L)	1	
27 (1)	VMC0917	EARTH SPRING	1	
28 (1)	VMA8874	INCLIND BASE HOLDER (S)	1	
29 (1)	VMD2078	P5 STOPPER BASE	1	
30 (1)	VXA4927	P5 POST STOPPER	1	
31 (1)	VMA8873	INCLIND BASE HOLDER (T)	1	
32 (1)	VMD2101	OPENER PIECE	1	
33 (1)	VML2776	TENSION SPRING ARM	1	
34 (1)	VMX1544	P4 UPPER LIMITER	1	
35 (1)	VMX2175	P4 SLEEVE	1	
36 (1)	VMX2176	P4 LOWER LIMITER	1	
40 (1)	VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41 (1)	VXP1826	ROLLER POST	2	
42 (1)	VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44 (1)	VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45 (1)	VMS5383	CASSETTE POSITION FIXTURE	1	
46 (1)	VXL2310	REVIEW ARM UNIT	1	
47 (1)	VXL2306	P5 ARM UNIT	1	
48 (1)	VXL2394	TAKE UP TENSION REG. ARM U	1	
49 (1)	VXL2246	PINCH ARM UNIT	1	
50 (1)	VMB2434	TENSION SPRING	1	
51 (1)	VXL2309	TENSION ARM (1) UNIT	1	
52 (1)	VXZ0310	TENSION BAND UNIT	1	
60 (1)	VXR0221	SUPPLY REEL TABLE UNIT	1	
61 (1)	VXR0237	TAKE UP REEL TABLE UNIT	1	
63 (1)	VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64 (1)	VXZ0313	TAKE UP BRAKE ARM UNIT	1	
65 (1)	2SB1370YD01E	POWER TRANSISTOR	1	
70 (1)	VEG1411	CYLINDER UNIT	1	[SUPPLIED FROM MBV]
71 (1)	VEH0844	UPPER CYLINDER UNIT	1	[SUPPLIED FROM MBV]
72 (1)	VDB1256	CYLINDER RETAINER	1	
73 (1)	VXP1823	CYLINDER ROTOR UNIT	1	
74 (1)	VEK7236	CYLINDER STATOR UNIT	1	
75 (1)	VXS0135	EARTH BRUSH UNIT	1	
80 (1)	VML2680	RELEASE LEVER	1	
81 (1)	VMB2013	RELEASE SPRING	1	
82 (1)	VMG1074	VIBRATIONPROOF RUBBER	1	[SUPPLIED FROM MBV]
B1 (1)	VHD0773	SCREW	2	
B2 (1)	XTV26+6F	SCREW	5	
B3 (1)	XTV26+4F	SCREW	1	
B5 (1)	XTV26+10F	SCREW	1	
B6 (1)	VHD0762	SCREW	3	
B7 (1)	XTV26+6FZ	SCREW	2	
B8 (1)	XTV26+8F	SCREW	2	
B9 (1)	XQN2+AJ4	SCREW	2	
B10 (1)	VHD0342	SCREW	3	
B11 (1)	VHD0842	SCREW	1	
B12 (1)	VHD0843	SCREW	2	
B13 (1)	VHD0844	SCREW	2	
B14 (1)	XYN26+C5	SCREW	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
N1 (1)	VHN0192	NUT	3	
N2 (1)	VHN0193	NUT	1	
W1 (1)	VMX2208	WASHER	3	
W2 (1)	XWGV26D56	WASHER	1	

❷ CHASSIS PARTS SECTION (2)



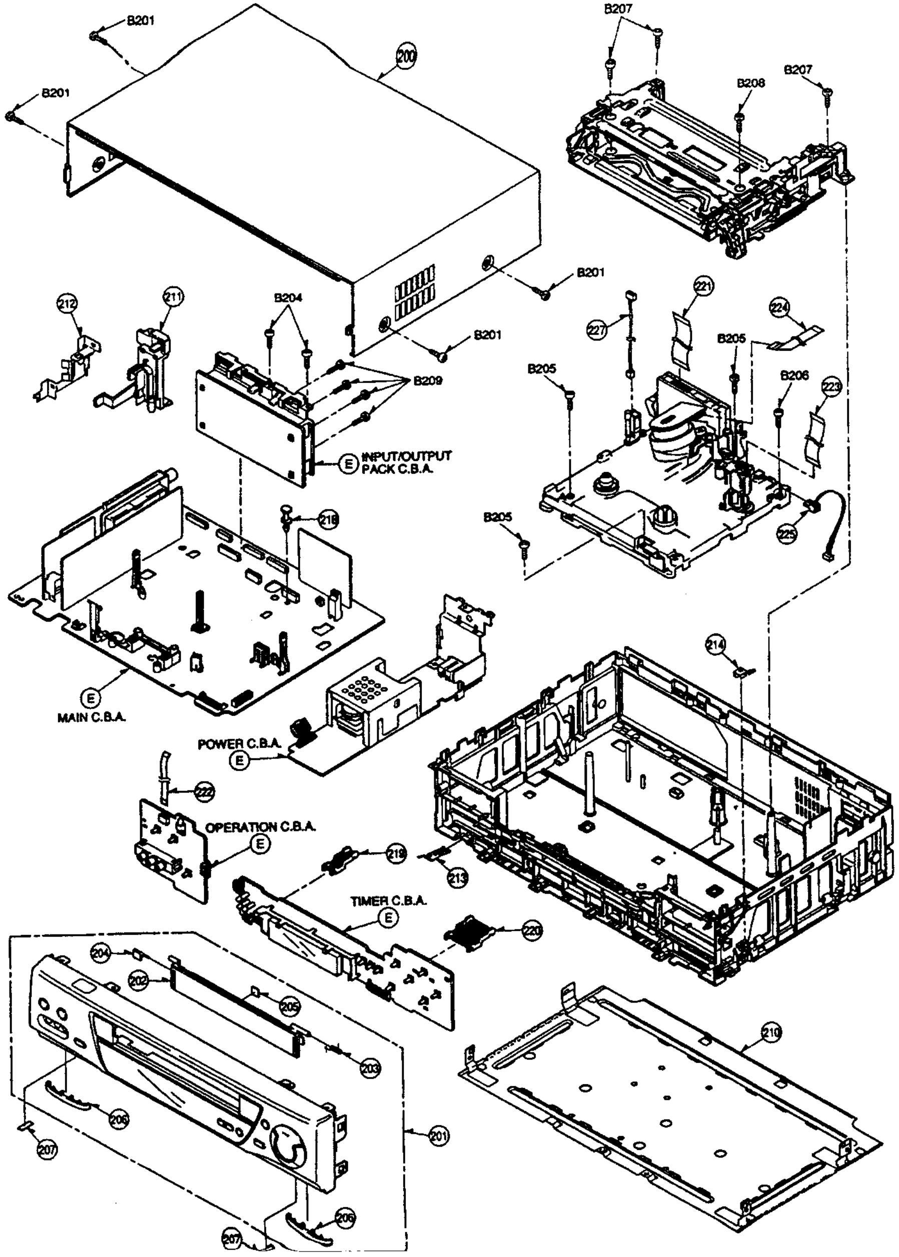
Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
100 (2)	VEK5927	CAPSTAN STATOR UNIT	1	
101 (2)	VBK0061	FG HEAD	1	
103 (2)	VMA8930	ROTOR STOPPER	1	
104 (2)	VMX1927	OIL SEAL	2	
105 (2)	VXD0140	HOUSING UNIT	1	
106 (2)	VXP1519	CAPSTAN ROTOR UNIT	1	
107 (2)	VXQ0297	THRUST SCREW UNIT	1	
108 (2)	VDG0913	MAIN CAM GEAR	1	
109 (2)	VDG0956	SUPPLY REEL GEAR	1	
110 (2)	VDG0957	TAKE UP REEL GEAR	1	
111 (2)	VDG0868	WORM WHEEL GEAR	1	
112 (2)	VDG0885	SUB CAM GEAR	1	
113 (2)	VDV0235	TIMING BELT	1	
120 (2)	VDG0866	WORM GEAR	1	
121 (2)	VEM0427	LOADING MOTOR (1) UNIT	1	
123 (2)	VMD1942	MOTOR BRACKET	1	
126 (2)	VML2725	IDLER CONTROL LEVER	1	
127 (2)	VSS0365	MODE SW	1	
128 (2)	VXA5138	SS BRAKE BASE UNIT	1	
129 (2)	VXA4799	TENSION ROLLER UNIT	1	
140 (2)	VXL2378	IDLER ARM UNIT	1	
141 (2)	VXL2372	DIRECT LEVER UNIT	1	
142 (2)	VXL2299	SUPPLY LOADING ARM UNIT	1	
143 (2)	VXL2300	TAKE UP LOADING ARM UNIT	1	
144 (2)	VXL2307	MAIN LEVER UNIT	1	
145 (2)	VXP1409	CENTRE CLUTCH	1	
B102 (2)	XTV26+8F	SCREW	1	
B103 (2)	XTV26+6F	SCREW	3	
B104 (2)	VHD0753	SCREW	4	
B105 (2)	VHD0754	SCREW	1	
B106 (2)	XSB26+4FZ	SCREW	1	
W101 (2)	VMX2208	WASHER	4	

Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

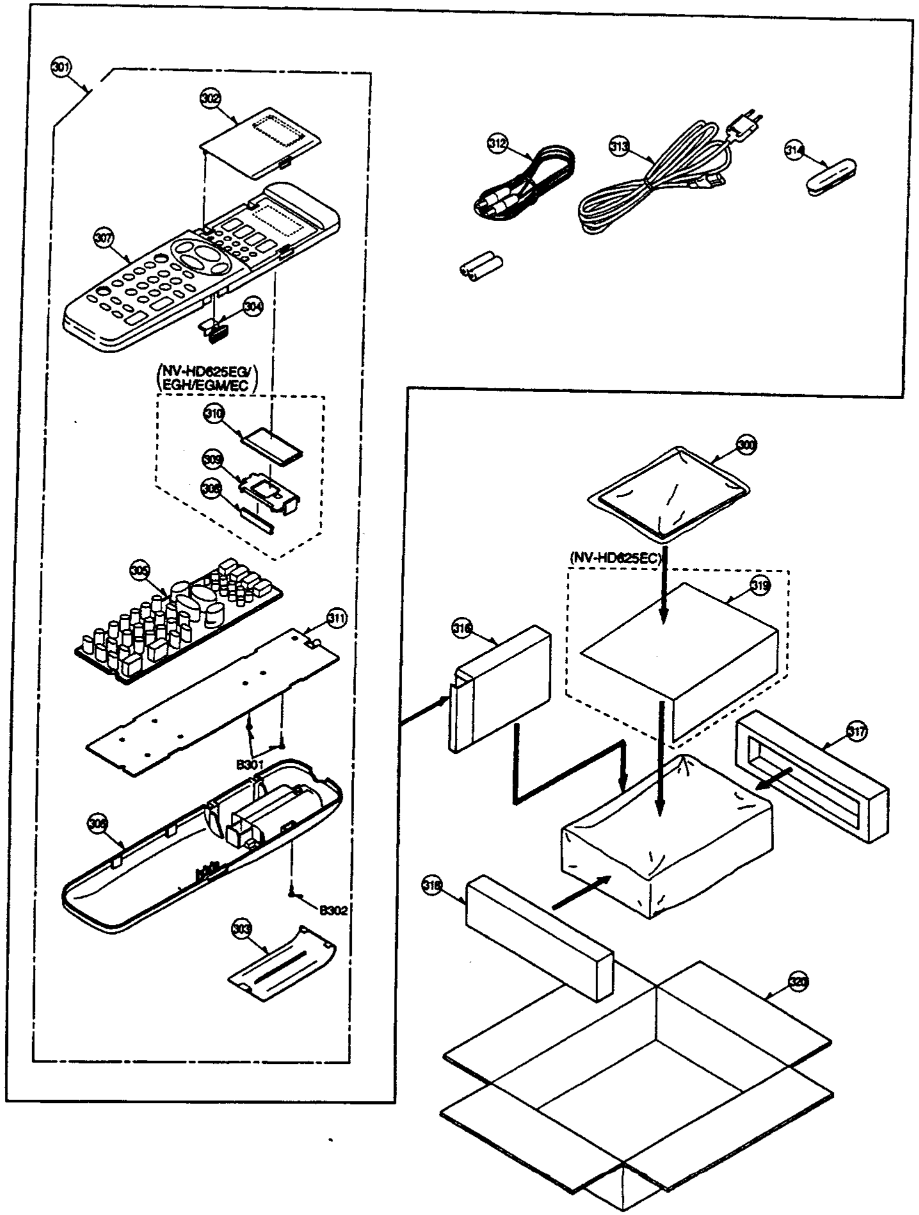
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
200 (3)	VGM1150	TOP PANEL	1	
201 (3)	VYP6436	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM
201 (3)	VYP6438	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-HD625B
201 (3)	VYP6437	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
				NV-HD625EC
202 (3)	VKF2709	BLINDER PANEL	1	[SUPPLIED FROM MBV]
203 (3)	VMB2521	BLINDER SPRING	1	
204 (3)	VDK0148	BLINDER CAM	1	
205 (3)	VMT0502	BLINDER CUSHION	1	
206 (3)	VKA0191	LEG	2	
207 (3)	VKA0122	FOOT	2	
210 (3)	VKU0412	BOTTOM PLATE	1	
211 (3)	VJH0979	ANTENNA JACK PLATE	1	[SUPPLIED FROM MBV]
212 (3)	VMC1213	ANTENNA EARTH SPRING	1	
213 (3)	VMC1062	JACK EARTH SPRING	1	
214 (3)	VMC1065	EARTH SPRING	1	
218 (3)	VMX2233	C. B. A. SPACER	1	
219 (3)	VJP3673A0056	BRIDGE CONNECTOR (5P)	1	PS3001-PS7502
220 (3)	VJP3673A0256	BRIDGE CONNECTOR (25P)	1	PS6002-PS7501
221 (3)	VWJ1158	FLAT CARD CABLE (20P)	1	[SUPPLIED FROM MBV]
				P501-P3002
222 (3)	VWJ1103	FLAT CARD CABLE (6P)	1	[SUPPLIED FROM MBV]
				P3901-P6501
223 (3)	VWJ1102	FLAT CARD CABLE (15P)	1	[SUPPLIED FROM MBV]
				P2002-CAPSTAN
224 (3)	VWJ1105	FLAT CARD CABLE (9P)	1	[SUPPLIED FROM MBV]
				P2005-CYLINDER
225 (3)	VEE9223	WIRE CABLE	1	P2003-POWER TR.
227 (3)	VEE9776	WIRE CABLE	1	[SUPPLIED FROM MBV]
				P4003-FE HEAD
B201 (3)	XTW3+10TFZ	SCREW	4	
B204 (3)	VHD0773	SCREW	2	
B205 (3)	VHD0168	SCREW	3	
B206 (3)	VHD0874	SCREW	1	
B207 (3)	XTV26+8FR	SCREW	3	
B208 (3)	XTV26+10F	SCREW	1	
B209 (3)	XTV3+8GFZ	SCREW	4	

❺ CASING PARTS SECTION



B201
200
B201
B207
B208
B207
B201
B201
212
211
B204
B209
E INPUT/OUTPUT PACK C.B.A.
221
224
227
B205
B205
B206
223
218
B205
225
E
MAIN C.B.A.
214
POWER C.B.A.
E
222
OPERATION C.B.A.
E
219
213
TIMER C.B.A.
E
220
204
202
205
203
206
207
201
210
206
207

❻ PACKING PARTS SECTION



301
302
307
304
(NV-HD625EG/ EGH/EGM/EC)
310
309
308
305
311
B301
306
B302
303
312
313
314
300
(NV-HD625EC)
319
316
317
318
320

Note: 1. * Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
⚠ 300 (4)	VQT6013	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ENGLISH/ITALIAN)		NV-HD625EG/EGM
⚠ 300 (4)	VQT6014	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(DUTCH)		NV-HD625EG/EGH/EC
⚠ 300 (4)	VQT6015	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(GERMAN/FRENCH)		NV-HD625EG/EGM/EC
⚠ 300 (4)	VQT6016	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(SPANISH/PORTUGUESE)		NV-HD625EC
⚠ 300 (4)	VQT6017	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(SWEDISH/DANISH/FINNISH)		NV-HD625EC
⚠ 300 (4)	VQT6024	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
		(ENGLISH)		NV-HD625B
301 (4)	VEQ1944	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
301 (4)	VEQ1961	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
				NV-HD625B
302 (4)	VGP4342	DOOR PANEL	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
302 (4)	VGP4385	DOOR PANEL	1	NV-HD625B
303 (4)	VKF2670	BATTERY COVER	1	
304 (4)	VGU7307	SWITCH KNOB	1	
305 (4)	VSP1040	RUBBER CONTACT	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
305 (4)	VSP1030	RUBBER CONTACT	1	[SUPPLIED FROM MBV]
				NV-HD625B
306 (4)	VYK7176	BOTTOM COVER UNIT	1	
307 (4)	VYK7617	TOP COVER UNIT	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
307 (4)	VYK7618	TOP COVER UNIT	1	[SUPPLIED FROM MBV]
				NV-HD625B
308 (4)	VSQ0004T	CONDUCTIVE RUBBER	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
309 (4)	VSQ0080	LCD SPACER	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
310 (4)	VSL0402A	LCD	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
311 (4)	———	REMOTE CONTROLLER C.B.A.	1	THE C.B.A. IS NOT
				SUPPLIED AS SPARE PART
312 (4)	VJA0063	DIN RF CABLE	1	
⚠ 313 (4)	VJA0064	AC CORD	1	NV-HD625EG/EGH/EGM/EC
⚠ 313 (4)	VJA0733	AC CORD	1	NV-HD625B
314 (4)	VKF2718	JACK COVER	1	[SUPPLIED FROM MBV]
316 (4)	VPK0025	ACCESSORIES PACKING	1	
317 (4)	VPN4440	CUSHION (R)	1	[SUPPLIED FROM MBV]
318 (4)	VPN4450	CUSHION (L)	1	[SUPPLIED FROM MBV]
319 (4)	VPN4460	PAD	1	NV-HD625EG
320 (4)	VPB0872	PACKING	1	[SUPPLIED FROM MBV]
B301 (4)	XTB2+6B	SCREW	2	
B302 (4)	XTB2+8FZ	SCREW	1	
		SERVICE FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	1	
	VFK0335	RETAINING RING REMOVER	1	
		(3MM/4MM)		
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK27	HEAD CLEANING STICK	1	
	VFK1024	MORLYTONE GREASE	1	
	VFK0680	WHITE GREASE	1	
	VFK0651	CENTRE FIXING TOOL	1	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
	VFK1140	11P EXTENSION CABLE	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

4-2. ELECTRICAL REPLACEMENT PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE : Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS(μF), P=μμF.
4. The P.C. Board units marked with "■" show below the main assembled parts.
5. The marking (RTL) indicates the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP06B07F	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-8)		(RTL) NV-HD625EG/EGM
				THE FOLLOWING C.B.A. S ARE
				INCLUDED IN MAIN C.B.A.
				VEP03D05D
				VEP04664B
				VEP07784E
				VEP07801AC
■	VEP03D05D	LUMINANCE &	1	[SUPPLIED FROM MBV]
		CHROMINANCE PACK C.B.A.		(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07F).
■	VEP04664B	HI-FI AUDIO PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07F).
■	VEP07784E	DECODER C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07F).
■	VEP07801AC	TV DEMODULATOR C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07F).
■	VEP06C38C	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-15)		(RTL) NV-HD625EGH
				THE FOLLOWING C.B.A. S ARE
				INCLUDED IN MAIN C.B.A.
				VEP03D05D
				VEP04664B
				VEP07784E
				VEP07801AC
■	VEP03D05D	LUMINANCE &	1	[SUPPLIED FROM MBV]
		CHROMINANCE PACK C.B.A.		(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06C38C).
■	VEP04664B	HI-FI AUDIO PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06C38C).
■	VEP07784E	DECODER C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06C38C).
■	VEP07801AC	TV DEMODULATOR C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06C38C).
■	VEP06B97G	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-21)		(RTL) NV-HD625B
				THE FOLLOWING C.B.A. S ARE
				INCLUDED IN MAIN C.B.A.
				VEP03D05H
				VEP04664B
				VEP07787Q
				VEP07801AD
■	VEP03D05H	LUMINANCE &	1	[SUPPLIED FROM MBV]
		CHROMINANCE PACK C.B.A.		(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B97G).
■	VEP04664B	HI-FI AUDIO PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B97G).

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP07787Q	NICAM DECODER C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B97G).
■	VEP07801AD	TV DEMODULATOR C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B97G).
■	VEP06B07H	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-28)		(RTL) NV-HD625EC
				THE FOLLOWING C.B.A. S ARE
				INCLUDED IN MAIN C.B.A.
				VEP03D05D
				VEP04664B
				VEP07787P
				VEP07801AC
■	VEP03D05D	LUMINANCE &	1	[SUPPLIED FROM MBV]
		CHROMINANCE PACK C.B.A.		(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07H).
■	VEP04664B	HI-FI AUDIO PACK C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07H).
■	VEP07787P	NICAM DECODER C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07H).
■	VEP07801AC	TV DEMODULATOR C.B.A.	1	[SUPPLIED FROM MBV]
				(RTL) INCLUDED IN
				MAIN C.B.A. (VEP06B07H).
■	VEP03D06D	INPUT/OUTPUT C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-35)		(RTL)
■	VEP05349A	HEAD AMP C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-36)		(RTL)
■	VEP07057D	TIMER C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-36)		(RTL) NV-HD625EG/EGH/EGM
■	VEP07057E	TIMER C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-37)		(RTL) NV-HD625B
■	VEP07057F	TIMER C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-37)		(RTL) NV-HD625EC
■	VEP06D04B	OPERATION C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-38)		(RTL)
⚠ ■	VEP01763C	POWER C.B.A.	1	[SUPPLIED FROM MBV]
		(Page:4-38)		(RTL)
■	———	CYLINDER STATOR C.B.A.	1	C.B.A. IS INCLUDED IN
		(Page:4-38)		CYLINDER STATOR UNIT
				(VEK7236).
■	———	MOTOR C.B.A.	1	C.B.A. IS INCLUDED IN
		(Page:4-39)		LOADING MOTOR (1) UNIT
				(VEM0427).
⚠ TU7601	ENG4725061	TUNER	1	[SUPPLIED FROM MBV]
				NV-HD625EG/EGH/EGM/EC
⚠ TU7601	ENG4725801	TUNER	1	[SUPPLIED FROM MBV]
				NV-HD625B
⚠ F1101	VSF0231C16	FUSE	1	
■	VEP06B07F	MAIN C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625EG/EGM

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C301	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C302	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C305	ECUX1H102KCV	C. CAPACITOR CH 50V 1000P	1	[SUPPLIED FROM MBV]
C306	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C307	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C309	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C310	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C311	ECUX1E104KBV	C. CAPACITOR CH 25V 0.1U	1	
C312	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C313	ECUX1H681KCV	C. CAPACITOR CH 50V 680P	1	[SUPPLIED FROM MBV]
C314	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C315	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C316	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C317	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C318	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C319	ECUX1H222KBV	C. CAPACITOR CH 50V 2200P	1	
C320	ECUX1C333KBV	C. CAPACITOR CH 16V 0.033U	1	
C321	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C322	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C323	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C324	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C325	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C327	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C328	ECUX1H080DCV	C. CAPACITOR CH 50V 8P	1	
C329	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C330	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C331	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C332	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C333	ECUX1H060DCV	C. CAPACITOR CH 50V 6P	1	
C334	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C335	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C336	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C337	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C338	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C339	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C340	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C341	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C342	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C343	ECEA1EKN4R7	E. CAPACITOR 25V 4.7U	1	
C344	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C345, 46	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C347	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C348	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C349	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C350	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C351	ECUX1H392KBV	C. CAPACITOR CH 50V 3900P	1	
C352	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C353	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C354	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C355	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C356	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C357	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C358	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	1	
C361	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C362	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C363	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C365, 66	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C370	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C371	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C372, 73	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	2	
C374	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C375	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C376	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C378	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C379, 80	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C381	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C0701, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0704	ECUX1H331JCV	C. CAPACITOR CH 50V 330P	1	
C0706	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0707, 08	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0709	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0710	ECUX1H470JPV	C. CAPACITOR CH 50V 47P	1	
C0711	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C0712	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C0714	ECQB1H473JF	P. CAPACITOR 50V 0.047U	1	
C0715	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C0716	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C0717	ECUX1H270JPV	C. CAPACITOR CH 50V 27P	1	
C0718	ECEA1HKSR47	E. CAPACITOR 50V 0.47U	1	
C0719	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0720	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0723	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0726	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0730	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0732	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C801	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C802	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C803	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C804	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C805	ECUX1H050CCV	C. CAPACITOR CH 50V 5P	1	
C806	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C807	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C1001	ECEA1CKE101	E. CAPACITOR 16V 100U	1	
C1002	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1003	ECEA1CKE470	E. CAPACITOR 16V 47U	1	
C1004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1005	ECEA0JKE220	E. CAPACITOR 6.3V 22U	1	
C1006	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1007	ECEA0JKE101	E. CAPACITOR 6.3V 100U	1	
C1008	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1009	ECEA1AKE220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1010	ECEA0JKE101	E. CAPACITOR 6.3V 100U	1	
C1011	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1012	ECEA0JKE101	E. CAPACITOR 6.3V 100U	1	
C1013	ECEA0JKE220	E. CAPACITOR 6.3V 22U	1	
C2001	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2002, 03	ECUV1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2004	ECUV1H223KBN	C. CAPACITOR CH 50V 0.022U	1	
C2005	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2006	ECUV1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2007	ECUV1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C2008	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2009	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2010	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	1	
C2011	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2012	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C2013	ECUV1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2014	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2015	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2016, 17	ECEA1EKA3R3	E. CAPACITOR 25V 3.3U	2	
C2018	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C2019, 20	ECUV1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2021, 22	ECUV1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C2023	ECUV1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2024, 25	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	2	
C2026	ECEA1HKSR22	E. CAPACITOR 50V 0.22U	1	
C2027	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2028	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C2029	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2030, 31	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	2	
C2032	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2033	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C2035	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C2036	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2037	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2038-40	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	3	
C2041, 42	ECUV1H680JCN	C. CAPACITOR CH 50V 68P	2	
C2043, 44	ECUV1C474ZFN	C. CAPACITOR CH 16V 0.47U	2	
C2045	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2046	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C2047-49	ECEA1VKA4R7	E. CAPACITOR 35V 4.7U	3	
C2050	ECUV1H473ZFN	C. CAPACITOR CH 50V 0.047U	1	
C2051	ECEA0JKE101	E. CAPACITOR 6.3V 100U	1	
C2052	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2053	ECEA1HKAR47	E. CAPACITOR 50V 0.47U	1	
C2054	ECUV1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2055	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2056	ECQV1H104JM	P. CAPACITOR 50V 0.1U	1	
C2057, 58	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2059	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C2061	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3001	ECUV1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3002	ECUV1H181JCN	C. CAPACITOR CH 50V 180P	1	
C3003	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3006	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3007	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C3008	ECUV1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3009	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3010	ECUV1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3017, 18	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C3019	ECUV1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3021	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3023	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3024	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C3027	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3028	ECUV1H151JCN	C. CAPACITOR CH 50V 150P	1	
C3029	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3031	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3032	ECUV1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3033	ECUV1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3055	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3057	ECUV1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3061	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3062	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3064	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C3065	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3066	ECUV1H151JCN	C. CAPACITOR CH 50V 150P	1	
C4004	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4005	ECCD2H181J	C. CAPACITOR 500V 180P	1	
C4006	ECEA1CKA330	E. CAPACITOR 16V 33U	1	
C4007	ECUV1H153KBN	C. CAPACITOR CH 50V 0.015U	1	
C4009	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4010	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4011	ECQP1362JZ	P. CAPACITOR 100V 3600P	1	[SUPPLIED FROM MBV]
C4017	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4018-20	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	3	
C4021, 22	ECUV1H153KBN	C. CAPACITOR CH 50V 0.015U	2	
C4023	ECUV1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C4024	ECUV1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4025, 26	ECEA1CKA220	E. CAPACITOR 16V 22U	2	
C4027	ECEA1HKS3R3	E. CAPACITOR 50V 3.3U	1	
C4028	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4029, 30	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	2	
C4031	ECEA1AKA101	E. CAPACITOR 10V 100U	1	
C4032	ECUV1H822KBN	C. CAPACITOR CH 50V 8200P	1	
C4033, 34	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	2	
C4038	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4039	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C4040	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4042	ECUV1H222JCN	C. CAPACITOR CH 50V 2200P	1	
C4044	ECEA1HKA4R7	E. CAPACITOR 50V 4.7U	1	
C4501	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C4502	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4503	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4506	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4507	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4508	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	
C4509	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4510	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4513	ECUV1H681JCN	C. CAPACITOR CH 50V 680P	1	
C4514	ECUV1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4515	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4521	ECUV1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4522	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4530	ECA0JAK470X	E. CAPACITOR 6.3V 47U	1	[SUPPLIED FROM MBV]
C4533	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4537	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4538	ECA1HAKR47X	E. CAPACITOR 50V 0.47U	1	[SUPPLIED FROM MBV]
C4541	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4551	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4556	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4558	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4559	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4560	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4565	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4566	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C4572	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4576	ECUV1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4585, 86	ECA0JAK101X	E. CAPACITOR 6.3V 100U	2	[SUPPLIED FROM MBV]
C4587	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4591	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4592	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4673	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C4674	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4676	ECA1VAK470X	E. CAPACITOR 35V 47U	1	[SUPPLIED FROM MBV]
C4677	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C6001	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6002	ECUV1C224ZFN	C. CAPACITOR CH 16V 0.22U	1	
C6003	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C6004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C6005	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C6006	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6007	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C6008	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C6009	ECUV1H150JCN	C. CAPACITOR CH 50V 15P	1	
C6010	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6013, 14	ECUV1H271JCN	C. CAPACITOR CH 50V 270P	2	
C6015	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6016	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6018	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7302	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7304	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7306	ECUV1H181JCN	C. CAPACITOR CH 50V 180P	1	
C7308	ECUV1H152KBN	C. CAPACITOR CH 50V 1500P	1	
C7310	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7311	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C7312	ECQB1H103JZ	P. CAPACITOR 50V 0.01U	1	
C7313	ECQV1H104JM	P. CAPACITOR 50V 0.1U	1	
C7314, 15	ECQB1H103JZ	P. CAPACITOR 50V 0.01U	2	
C7320, 21	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C7323, 24	ECUV1H153KBN	C. CAPACITOR CH 50V 0.015U	2	
C7325	ECUX1H223KBV	C. CAPACITOR CH 50V 0.022U	1	
C7326	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7328	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7330	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7332, 33	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	2	
C7337	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7339	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7340	ECUV1H390JPN	C. CAPACITOR CH 50V 39P	1	
C7341	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C7345	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7346	ECUV1H390JPN	C. CAPACITOR CH 50V 39P	1	
C7347	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C7349, 50	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	2	
C7352	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7353	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7601	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7604	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7605	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7606	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C7608	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C7609	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7610	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7612	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7614	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7615	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7701	ECUV1H150JCN	C. CAPACITOR CH 50V 15P	1	
C7702	ECUV1H080DCN	C. CAPACITOR CH 50V 8P	1	
C7704, 05	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7706	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7707-10	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	4	
C7712	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7713	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7714	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7715	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7716	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C7718	ECUX1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7721	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7722	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7723	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7724	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7726	VLQ0500J121	COIL 120UH	1	
C7729	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7731	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7732	ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7734	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7736	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7737	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7738, 39	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7743	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7747	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7750	ECUX1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7751	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7752	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C7753, 54	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C7755-57	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C7758	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C7759, 60	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
D302, 03	1SS355	DIODE	2	
D305	1SS355	DIODE	1	
D313, 14	1SS355	DIODE	2	
D318	1SS355	DIODE	1	
D319	MA151K	DIODE	1	
D320	MA151WK	DIODE	1	
D321	1SS355	DIODE	1	
D802-04	1SS355	DIODE	3	
D1001	MA4051-L	DIODE	1	
D1003	MA4120-M	DIODE	1	
D1004	MA4051-L	DIODE	1	
D1006	1SS355	DIODE	1	
D1007, 08	1SS355	DIODE	2	
D1009	1SS254	DIODE	1	
D2001	MA153	DIODE	1	
D2002	MA151K	DIODE	1	
D2003-05	1SS355	DIODE	3	
D2006, 07	MA700	DIODE	2	
D2008, 09	MA185	DIODE	2	
D2010-13	1SS355	DIODE	4	
D3001, 02	1SS254	DIODE	2	
D3005	MA723-VT	DIODE	1	
D4003-05	1SS254	DIODE	3	
D4007	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
D4504	1SS254	DIODE	1	
D6001	LN59LT.VT	LED	1	
D6002	MA4075-L	DIODE	1	
D6003	MA151K	DIODE	1	
D7304	MA29T-B	DIODE	1	
D7305	1SS254	DIODE	1	
D7307	MA151K	DIODE	1	
D7601	MA4300-H	DIODE	1	
D7602, 03	1SS254	DIODE	2	
D7704	MA700A	DIODE	1	
D7705	1SS254	DIODE	1	
D7707	1SS254	DIODE	1	
IC301	TDA9725V2	IC	1	[SUPPLIED FROM MBV]
IC302	TL8850AF	IC	1	
IC0701	LA7576	IC	1	
IC1001	HA17431PA	IC	1	
IC2001	BA6897-V3	IC	1	
IC2002	BA6871BS	IC	1	
IC2003	AN3814K	IC	1	
IC4001	BA7795FS	IC	1	
IC4501	BH7778AK	IC	1	
IC6001	MN675536VRBY	IC	1	[SUPPLIED FROM MBV]
IC6002, 03	ON1387	PHOTO INTERRUPTER	2	
IC7301	TDA8845	IC	1	
IC7302	TA8721SN	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC7701	M27C1001BAAA	IC	1	[SUPPLIED FROM MBV]
IC7702	MC74HCT573AN	IC	1	[SUPPLIED FROM MBV]
IC7703	NJM2535M	IC	1	[SUPPLIED FROM MBV]
IC7704	ST24W16FB6	IC	1	[SUPPLIED FROM MBV]
IC7705	BH7236AF	IC	1	
IC7706	SABC513AL16P	IC	1	[SUPPLIED FROM MBV]
IC7708	SAA5281ZP03	IC	1	
IC7712	MC74HCT74AD	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001	YSF0015A10	IC PROTECTOR	1	
K309	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
K310	ERJ3GEY0R00	M.RESISTOR CH 1/10W 0	1	
K0702	ERJ3GEY0R00	M.RESISTOR CH 1/10W 0	1	
K0704, 05	ERJ3GEY0R00	M.RESISTOR CH 1/10W 0	2	
K3001	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K3005	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K3014, 15	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	2	
K4002	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K4004	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K4502-06	ERJ3GEY0R00	M.RESISTOR CH 1/10W 0	5	
K6002	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K6006, 07	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	2	
K7302	ERJ3GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7315	ERJ3GEYJ302	M.RESISTOR CH 1/10W 3K	1	
K7316	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7619	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K7621	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K7624	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K7625	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7709	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
K7711	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	1	
L301	VLQ0500J151	COIL 150UH	1	
L302, 03	VLQ0500J100	COIL 10UH	2	
L304	VLQ0500J390	COIL 39UH	1	
L305	VLQ0500J470	COIL 47UH	1	
L306	VLQ0500J101	COIL 100UH	1	
L307	VLQ0500J270	COIL 27UH	1	
L308	VLQ0500J100	COIL 10UH	1	
L309	VLQ0500J470	COIL 47UH	1	
L311, 12	VLQ0500J680	COIL 68UH	2	
L313, 14	VLQ0500J390	COIL 39UH	2	
L315	VLQ0500J101	COIL 100UH	1	
L0701	VLQ0163JR18	COIL 0.18UH	1	[SUPPLIED FROM MBV]
L0705	VLQ0163J6R8	COIL 6.8UH	1	
L0706	VLQEL0SS150K	COIL 15UH	1	
L801	VLQ0500J101	COIL 100UH	1	
L2001	VLP0083	COIL	1	
L3001	VLQ0500J820	COIL 82UH	1	
L3002	VLQ0500J151	COIL 150UH	1	
L3003	VLQ0500J6R8	COIL 6.8UH	1	
L3004	VLQ0500J120	COIL 12UH	1	
L3006	VLQ0500J101	COIL 100UH	1	
L3008	VLQ0500J270	COIL 27UH	1	
L3009	VLQ0500J680	COIL 68UH	1	
L3012	VLQ0500J680	COIL 68UH	1	
L4002	ELESN471KA	INDUCTOR 470UH	1	
L4003	VLQ0500J680	COIL 68UH	1	
L4005, 06	ERJ6GNZ0R00	M.RESISTOR CH 1/10W 0	2	
L4007	VLQ0123	COIL	1	
L6001	VLQ0500J101	COIL 100UH	1	
L6002	VLP0083	COIL	1	
L6003, 04	VLQ0500J680	COIL 68UH	2	
L7603, 04	VLQ0500J680	COIL 68UH	2	
L7606	VLQ0500J180	COIL 18UH	1	
L7607, 08	VLQ0500J330	COIL 33UH	2	
L7702	VLQ0500J3R3	COIL 3.3UH	1	
L7703	VLQ0500J270	COIL 27UH	1	
L7704	VLQ0500J100	COIL 10UH	1	
L7705	VLQ0500J390	COIL 39UH	1	
L7707	VLQ0500J120	COIL 12UH	1	
L7708	VLQ0500J150	COIL 15UH	1	
LB303-06	VLP0145	COIL	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB307-11	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	5	
LB312	VLP0145	COIL	1	
LB1001	VLP0125	COIL	1	
LB3001	VLP0083	COIL	1	
P2001	VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002	VJS3537A015B	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3483	CONNECTOR (MALE) 3P	1	
P2005	VJS3537A009B	CONNECTOR (FEMALE) 9P	1	
P3002	VJS3537A020B	CONNECTOR (FEMALE) 20P	1	
P4002	VJS3675E006B	CONNECTOR (FEMALE) 6P	1	
P4003	VJP1230T	CONNECTOR (MALE) 3P	1	
P6001	VJS3821-	CONNECTOR (FEMALE) 4P	1	
PK301	VJR0776B010W	CONNECTOR (MALE) 10P	1	[SUPPLIED FROM MBV]
PK302	VJR0776B011W	CONNECTOR (MALE) 11P	1	[SUPPLIED FROM MBV]
PK303	VJR0776B012W	CONNECTOR (MALE) 12P	1	[SUPPLIED FROM MBV]
PK304	VJR0776B003W	CONNECTOR (MALE) 3P	1	
PK0701	VJR0816E010W	CONNECTOR (MALE) 10P	1	
PK4501	VJR0777B008W	CONNECTOR (MALE) 8P	1	
PK4502, 03	VJR0777B010W	CONNECTOR (MALE) 10P	2	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B005W	CONNECTOR (MALE) 5P	1	
PP0701	VJP3588A004B	CONNECTOR (MALE) 4P	1	
PP3002	VJP3042B013W	CONNECTOR (MALE) 13P	1	
PP3003	VJP3042B005W	CONNECTOR (MALE) 5P	1	
PP3004	VJP3042B008W	CONNECTOR (MALE) 8P	1	
PP3005	VJP3042B010W	CONNECTOR (MALE) 10P	1	
PS3001	VJS3673F005B	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
PS3006	VJS3631A011A	CONNECTOR (FEMALE) 11P	1	
PS6002	VJS3673B025B	CONNECTOR (FEMALE) 25P	1	
Q301, 02	MSD601	TRANSISTOR	2	
Q305	MSD601	TRANSISTOR	1	
Q306	MSB709	TRANSISTOR	1	
Q307	MSB709-R	TRANSISTOR	1	
Q308	MSB709	TRANSISTOR	1	
Q309	MSC2295	TRANSISTOR	1	
Q310	MSD601	TRANSISTOR	1	
Q0701	MSD601-S	TRANSISTOR	1	
Q0702	MSB709-R	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q803	MSC2295	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q805	MSD601	TRANSISTOR	1	
Q1001	MSD601	TRANSISTOR	1	
Q1002-04	2SD1996-S	TRANSISTOR	3	
Q1005	2SD602A-R	TRANSISTOR	1	
Q1006	2SD1996-S	TRANSISTOR	1	
Q1007	2SD25440PQA	TRANSISTOR	1	
Q3001	MSC2295	TRANSISTOR	1	
Q3002	MSB709	TRANSISTOR	1	
Q3003, 04	MSD601	TRANSISTOR	2	
Q3005	MSC2295	TRANSISTOR	1	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSC2295	TRANSISTOR	1	
Q3010	MSB709-R	TRANSISTOR	1	
Q3023	MSC2295	TRANSISTOR	1	
Q3024	MSD601	TRANSISTOR	1	
Q3025	MSC2295	TRANSISTOR	1	
Q4005	2SB1320A-R	TRANSISTOR	1	
Q4006	2SD602A-R	TRANSISTOR	1	
Q4007-09	MSD601-R	TRANSISTOR	3	
Q4501	2SD1468	TRANSISTOR	1	
Q4551	2SA1515	TRANSISTOR	1	
Q6001	MSB709	TRANSISTOR	1	
Q6002, 03	PN208LT-NCYT	PHOTO TRANSISTOR	2	
Q7301	MSD601-S	TRANSISTOR	1	
Q7601	XN4601	TRANSISTOR-TRANSISTOR	1	
Q7602	MSD601	TRANSISTOR	1	
Q7603	2SB710A	TRANSISTOR	1	
Q7702	MSB709	TRANSISTOR	1	
Q7704, 05	MSD601	TRANSISTOR	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q7706	MSB709	TRANSISTOR	1	
Q7707-12	MSD601	TRANSISTOR	6	
QR302	UN2113	TRANSISTOR-RESISTOR	1	
QR304	UN2113	TRANSISTOR-RESISTOR	1	
QR305	UN2213	TRANSISTOR-RESISTOR	1	
QR311	UN2113	TRANSISTOR-RESISTOR	1	
QR317	UN2213	TRANSISTOR-RESISTOR	1	
QR318	UN2210	TRANSISTOR-RESISTOR	1	
QR801	UN2213	TRANSISTOR-RESISTOR	1	
QR1001, 02	UN2113	TRANSISTOR-RESISTOR	2	
QR1003	UN2213	TRANSISTOR-RESISTOR	1	
QR3001	UN2111	TRANSISTOR-RESISTOR	1	
QR3002, 03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR3027	UN2212	TRANSISTOR-RESISTOR	1	
QR4001	UN2212	TRANSISTOR-RESISTOR	1	
QR4451, 52	UN5213	TRANSISTOR-RESISTOR	2	
QR6001	XN1211	TRANSISTOR-RESISTOR	1	
QR6002	UN2114	TRANSISTOR-RESISTOR	1	
QR6004	XN1213	TRANSISTOR-RESISTOR	1	
QR6005	UN2112	TRANSISTOR-RESISTOR	1	
QR7304	UN2213	TRANSISTOR-RESISTOR	1	
QR7601	UN2213	TRANSISTOR-RESISTOR	1	
QR7602	UN2212	TRANSISTOR-RESISTOR	1	
QR7603	UN2213	TRANSISTOR-RESISTOR	1	
QR7703	UN2113	TRANSISTOR-RESISTOR	1	
R303	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R304	ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R305	ERJ3GEY0682	M.RESISTOR CH 1/16W 6.8K	1	
R307	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R308	ERJ3GEY0102	M.RESISTOR CH 1/16W 1K	1	
R309	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R310, 11	ERJ3GEY0152	M.RESISTOR CH 1/16W 1.5K	2	
R312	ERJ3GEY0472	M.RESISTOR CH 1/16W 4.7K	1	
R313	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R314	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R315	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R317	ERJ3GEY0472	M.RESISTOR CH 1/16W 4.7K	1	
R318	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R320	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R321	ERJ3GEYJ120	M.RESISTOR CH 1/16W 12	1	
R322	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R323	ERJ3GEY0102	M.RESISTOR CH 1/16W 1K	1	
R324, 25	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R326	ERJ3GEYJ242	M.RESISTOR CH 1/16W 2.4K	1	
R327	ERJ3GEY0102	M.RESISTOR CH 1/16W 1K	1	
R328	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R329	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R330	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R332	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R333	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R335	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R337	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
R338	ERJ3GEY0471	M.RESISTOR CH 1/16W 470	1	
R339	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R340	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R341	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R344	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R346, 47	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R353	ERJ3GEY0102	M.RESISTOR CH 1/16W 1K	1	
R354	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R355	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R356, 57	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	2	
R358	ERJ3GEY0102	M.RESISTOR CH 1/16W 1K	1	
R360	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R368	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R373	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R374	ERJ3GEY0102	M.RESISTOR CH 1/16W 1K	1	
R375	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R376	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0704	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706, 07	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R0708	ERJ3GEY0152	M. RESISTOR CH 1/16W 1.5K	1	
R0709	ERJ3GEYJ106	M. RESISTOR CH 1/16W 1M	1	
R0710	ERJ6GEY0154	M. RESISTOR CH 1/10W 150K	1	
R0713	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R0714	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0715	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R0716	VRE0040E151	M. RESISTOR CH 1/10W 150	1	
R0717	ERJ3GEYJ330	M. RESISTOR CH 1/16W 33	1	
R0718	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R0719	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R0720	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R0722	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R0728	ERJ3GEY0471	M. RESISTOR CH 1/16W 470	1	
R0729	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R0732	ERJ3GEY0471	M. RESISTOR CH 1/16W 470	1	
R0783	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R801	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R802	ERJ3GEY0681	M. RESISTOR CH 1/16W 680	1	
R803	ERJ3GEY0182	M. RESISTOR CH 1/16W 1.8K	1	
R810	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R811	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R812	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R813	ERJ3GEY0561	M. RESISTOR CH 1/16W 560	1	[SUPPLIED FROM MBV]
R814	ERJ3GEY0103	M. RESISTOR CH 1/16W 10K	1	
R815	ERJ3GEY0681	M. RESISTOR CH 1/16W 680	1	
R816	ERJ3GEY0181	M. RESISTOR CH 1/16W 180	1	
R817	ERJ3GEY0101	M. RESISTOR CH 1/16W 100	1	[SUPPLIED FROM MBV]
R818	ERJ3GEY0242	M. RESISTOR CH 1/16W 2.4K	1	
R1001	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	1	
R1002	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R1003	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R1004	ERJ6GEYJ363	M. RESISTOR CH 1/10W 36K	1	
R1005	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R1006	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R1007	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R1008	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	1	
R1009, 10	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	2	
R1011	ERDS1TJ272	C. RESISTOR 1/2W 2.7K	1	
R2001	ERJ6GEY0913	M. RESISTOR CH 1/10W 91K	1	
R2002-04	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R2005	ERX1SJ1R8	M. RESISTOR 1W 1.8	1	
R2006	ERJ6GEY0512	M. RESISTOR CH 1/10W 5.1K	1	
R2007	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2009, 10	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R2011	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R2012	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R2013	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R2014, 15	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2016	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2017, 18	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2019	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R2020	ERJ6GEY0471	M. RESISTOR.CH 1/10W 470	1	
R2021	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R2022	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2023	ERDS2CX08200	M. RESISTOR 1/4W 820	1	
R2024	ERDS2CX06800	M. RESISTOR 1/4W 680	1	
R2025	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R2026, 27	ERDS2TJ560	C. RESISTOR 1/4W 56	2	
R2028	ERDS1TJ561	C. RESISTOR 1/2W 560	1	
R2029	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2030	ERJ6GEY0432	M. RESISTOR CH 1/10W 4.3K	1	
R2031	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R2032	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R2034	ERJ6GEY0133	M. RESISTOR CH 1/10W 13K	1	
R2035	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R2036, 37	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R2039, 40	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	2	
R2041, 42	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	2	
R2043	ERDS2TJ560	C. RESISTOR 1/4W 56	1	
R2044	ERX12SJR47	M. RESISTOR 1/2W 0.47	1	
R2045	ERDS2FJ1R5	C. RESISTOR 1/4W 1.5	1	
R2046-48	ERDS2TJ330	C. RESISTOR 1/4W 33	3	
R2049	ERDS2FJ1R2	C. RESISTOR 1/4W 1.2	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2050, 51	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	2	
R2052	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R3001	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	1	
R3002	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R3003	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3004	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R3005	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R3006	ERDS2TJ472	C. RESISTOR 1/4W 4.7K	1	
R3007	ERJ6GEY0681	M. RESISTOR CH 1/10W 680	1	
R3008	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3009	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R3012	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R3015	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3018	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3019, 20	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	2	
R3021	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R3022	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3023, 24	ERJ6GEY0821	M. RESISTOR CH 1/10W 820	2	
R3025	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R3026	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3029	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3030	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3032	ERJ6GEY0334	M. RESISTOR CH 1/10W 330K	1	
R3033	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3034	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3037	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3039	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3065	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3068, 69	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R3076, 77	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R3078	ERDS2T0	C. RESISTOR 1/4W 0	1	
R3079, 80	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	2	
R3081	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R3082	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R3083	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3084	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R3085	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3087	ERJ6GEY0563	M. RESISTOR CH 1/10W 56K	1	
R4003	ERJ6GEY0100	M. RESISTOR CH 1/10W 10	1	
R4007	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R4011	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4012	ERJ6GEY0123	M. RESISTOR CH 1/10W 12K	1	
R4013	ERJ6GEYJ163	M. RESISTOR CH 1/10W 16K	1	
R4014	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	1	
R4015	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	1	
R4016	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R4017	ERJ6GEY0133	M. RESISTOR CH 1/10W 1.3K	1	
R4019	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R4020	ERJ6GEY0123	M. RESISTOR CH 1/10W 12K	1	
R4021	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	1	
R4022	ERJ6GEY0391	M. RESISTOR CH 1/10W 390	1	
R4023	ERJ6GEY0394	M. RESISTOR CH 1/10W 390K	1	
R4024	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R4025	ERJ6GEY0682	M. RESISTOR CH 1/10W 6.8K	1	
R4026	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R4027, 28	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R4029	ERJ6GEY0912	M. RESISTOR CH 1/10W 9.1K	1	
R4030	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R4031	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R4032	ERJ6GEY0271	M. RESISTOR CH 1/10W 270	1	
R4033	ERJ6GEY0681	M. RESISTOR CH 1/10W 680	1	
R4034	ERJ6GEY0183	M. RESISTOR CH 1/10W 18K	1	
R4035, 36	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R4037	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4038	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R4039	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R4040	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4041, 42	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	2	
R4043	ERG2SJ821	M. RESISTOR 2W 820	1	
R4044	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4048	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R4049	ERJ6GEY0682	M. RESISTOR CH 1/10W 6.8K	1	
R4050	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R4051	ERJ6GEY0822	M. RESISTOR CH 1/10W 8.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4054	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R4055	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R4056	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	1	
R4057	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R4058	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R4059	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R4067, 68	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	2	
R4071	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R4073	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4503	ERJ3RBD203	M. RESISTOR CH 1/16W 20K	1	
R4504	ERJ3GEY0224	M. RESISTOR CH 1/16W 220K	1	
R4508	ERJ3GEY0224	M. RESISTOR CH 1/16W 220K	1	
R4512	ERJ3RBD123	M. RESISTOR CH 1/16W 12K	1	
R4513	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4517, 18	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R4519, 20	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4522	ERJ3GEYK225	M. RESISTOR CH 1/16W 2.2M	1	
R4528	ERJ3RBD153	M. RESISTOR CH 1/16W 15K	1	
R4529	ERJ3GEY0562	M. RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4542	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R4542	ERJ3RBD912	M. RESISTOR CH 1/16W 9.1K	1	
R4563	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R4584	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4585	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R4586	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4588	ERJ6RED124	M. RESISTOR CH 1/10W 120K	1	
R4589	ERJ6RED114	M. RESISTOR CH 1/10W 110K	1	
R4601	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4603, 04	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R4605	ERJ6GEY0203	M. RESISTOR CH 1/10W 20K	1	
R4606	ERJ3GEYJ203	M. RESISTOR CH 1/16W 20K	1	
R4607	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4608	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R4621	ERJ6GEY0163	M. RESISTOR CH 1/10W 16K	1	
R4623	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R4624	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4641, 42	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4663, 64	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4665	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4667	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	1	
R4668	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R4704	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R6001	ERJ6GEYJ201	M. RESISTOR CH 1/10W 200	1	
R6002	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6003-05	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	3	
R6006, 07	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	2	
R6008	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6009	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6010	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6011	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6012, 13	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	2	
R6014	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R6015	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R6016	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	1	
R6017	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R6019	ERDS2TJ473	C. RESISTOR 1/4W 47K	1	
R6020	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R6021-23	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	3	
R6024	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R6025	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6026	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R6027	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6028	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R6029, 30	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	2	
R6033	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6034	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6035, 36	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R6037, 38	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	2	
R6039	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
R6040, 41	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R6043	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R6044	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6046	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6048	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6049	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R6050	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6052	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6054	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R6055	ERJ6GEY0183	M. RESISTOR CH 1/10W 18K	1	
R6056-58	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R6059	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6060	ERJ6GEY0822	M. RESISTOR CH 1/10W 8.2K	1	
R6061	ERJ6GEY0243	M. RESISTOR CH 1/10W 24K	1	
R7302	ERJ3GEY0133	M. RESISTOR CH 1/16W 13K	1	
R7303	ERJ3GEY0222	M. RESISTOR CH 1/16W 2.2K	1	
R7304	ERJ3GEY0392	M. RESISTOR CH 1/16W 3.9K	1	
R7305	ERJ3GEY0562	M. RESISTOR CH 1/16W 5.6K	1	
R7307	ERJ3GEY0272	M. RESISTOR CH 1/16W 2.7K	1	
R7311	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7313	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R7320	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7323	ERJ3GEY0472	M. RESISTOR CH 1/16W 4.7K	1	
R7324, 25	ERJ3GEY0471	M. RESISTOR CH 1/16W 470	2	
R7326	ERJ3GEY0113	M. RESISTOR CH 1/16W 11K	1	
R7327	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7328	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7329	ERJ3GEY0332	M. RESISTOR CH 1/16W 3.3K	1	
R7330	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7331	ERJ3GEY0113	M. RESISTOR CH 1/16W 11K	1	
R7336	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R7337	ERJ3GEY0471	M. RESISTOR CH 1/16W 470	1	
R7346	ERJ3GEY0182	M. RESISTOR CH 1/16W 1.8K	1	
R7352, 53	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R7354, 55	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	2	
R7358, 59	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R7362, 63	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R7601	ERJ6GEY0151	M. RESISTOR CH 1/10W 150	1	
R7602, 03	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R7604	ERJ6GEY0151	M. RESISTOR CH 1/10W 150	1	
R7605-07	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R7612	ERG2SJ331	M. RESISTOR 2W 330	1	
R7614	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7616	ERG2SJ331	M. RESISTOR 2W 330	1	
R7618	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7619	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7622, 23	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	2	
R7624	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7625	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R7626	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R7703, 04	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	2	
R7705	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7706	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
R7707	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7708	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7709	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7711	ERJ6GEY0122	M. RESISTOR CH 1/10W 1.2K	1	
R7712, 13	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	2	
R7714-19	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	6	
R7722, 23	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	2	
R7725	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7726	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7727	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7732	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7733	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7735	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7736	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7737, 38	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7739	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7740	ERJ6GEY0911	M. RESISTOR CH 1/10W 910	1	
R7746	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	
R7747	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7750	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7751	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R7756	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R7757	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7758	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7761	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7766-68	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	3	
R7769	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R7770	ERJ6GEYG224	M. RESISTOR CH 1/10W 220K	1	
R7771	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R7772	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R7773	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R7774	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R7775	ERJ6GEYG473	M. RESISTOR CH 1/10W 47K	1	
R7776	ERJ6GEYG472	M. RESISTOR CH 1/10W 4.7K	1	
R7777	ERJ6GEYK225	M. RESISTOR CH 1/10W 2.2M	1	
R7778	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R7779	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R7780	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R7781	ERJ6GEYG224	M. RESISTOR CH 1/10W 220K	1	
R7782	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R7785	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R7786, 87	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7788	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R7789	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1	
R7790	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R7791	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R7792	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R7793	ERJ6GEYG182	M. RESISTOR CH 1/10W 1.8K	1	
RX7701	EXBF9E103J	RESISTOR-RESISTOR	1	
S6001	VES0700	SWITCH	1	
T0703	EQV5EC071A	TRANSFORMER	1	
T0704	EQV5EC072A	TRANSFORMER	1	
T4002	EI070F0148	TRANSFORMER	1	
T7301	EQX700020P	TRANSFORMER	1	
T7304	EI5SEC017A	TRANSFORMER	1	
T7306	EQ6SEC033A	TRANSFORMER	1	
⚠ TU7001	EN84725061	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B24	V. RESISTOR 20K	1	
VR2001	EVNCYAA03B54	V. RESISTOR 50K	1	
VR3001, 02	EVNCYAA03B23	V. RESISTOR 2K	2	
VR3012, 13	EVNCYAA03B52	V. RESISTOR 500	2	
VR3014	EVNCYAA03B54	V. RESISTOR 50K	1	
VR4001	EVNCYAA03B15	V. RESISTOR 100K	1	
VR4601	EVNECSA00B53	V. RESISTOR 6.8K	1	
VR4508	EVNECSA00B53	V. RESISTOR 5K	1	
VR4550	EVNECSA00B14	V. RESISTOR 10K	1	
VR7301	EVNCBAA00B53	V. RESISTOR 5K	1	
X301	VSX0162	CRYSTAL OSCILLATOR	1	
X0701	VLF1178	FILTER	1	
X0703	EFCS5R5MW5	FILTER	1	
X0704	VLF1368	FILTER	1	[SUPPLIED FROM MBV]
X6001	VSX0583	CRYSTAL OSCILLATOR	1	
X7301	EFCS5R5MS5	FILTER	1	
X7304	EFCS5R74MS8	FILTER	1	
X7305	VSX0640	CRYSTAL OSCILLATOR	1	
X7702	VSX0363	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMP4904	SUPPORT ANGLE	2	
	VMD2329	PHOTO TRANSISTOR HOLDER	2	
	VMD2328	REEL GUIDE	1	
	VMD2330	LED HOLDER	1	
	VMP4904	SUPPORT ANGLE	1	FOR DECODER C.B.A.
	VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
■	VEP06C36C	MAIN C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625EGN
C301	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C302	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C305	ECUX1H102BCV	C. CAPACITOR CH 50V 1000P	1	[SUPPLIED FROM MBV]
C306	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C307	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C309	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C310	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C311	ECUM1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C312	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C313	ECUX1H681KCV	C. CAPACITOR CH 50V 680P	1	[SUPPLIED FROM MBV]
C314	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C315	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C316	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C317	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C318	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C319	ECUX1H222KBV	C. CAPACITOR CH 50V 2200P	1	
C320	ECUX1C333KBV	C. CAPACITOR CH 16V 0.033U	1	
C321	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C322	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C323	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C324	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C325	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C327	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C328	ECUX1H080DCV	C. CAPACITOR CH 50V 8P	1	
C329	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C330	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C331	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C332	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C333	ECUX1H060DCV	C. CAPACITOR CH 50V 6P	1	
C334	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C335	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C336	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C337	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C338	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C339	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C340	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C341	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C342	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C343	ECEA1EK04R7	E. CAPACITOR 25V 4.7U	1	
C344	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C345, 46	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C347	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C348	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C349	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C350	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C351	ECUX1H392KBV	C. CAPACITOR CH 50V 3900P	1	
C352	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C353	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C354	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C355	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C356	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C357	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C358	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	1	
C361	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C362	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C363	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C365, 66	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C370	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C371	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C372, 73	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	2	
C374	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C375	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C376	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C378	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C379, 80	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C381	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C0701, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0704	ECUX1H331JCV	C. CAPACITOR CH 50V 330P	1	
C0706	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0707, 08	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0709	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0710	ECUX1H470JPV	C. CAPACITOR CH 50V 47P	1	
C0711	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C0712	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0714	ECQB1H473JF	P. CAPACITOR 50V 0.047U	1	
C0715	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C0716	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C0717	ECUX1H270JPV	C. CAPACITOR CH 50V 27P	1	
C0718	ECEA1HKSR47	E. CAPACITOR 50V 0.47U	1	
C0719	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C0720	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0723	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0726	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0730	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0732	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C801	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C802	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C803	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C804	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C805	ECUX1H050CCV	C. CAPACITOR CH 50V 5P	1	
C806	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C807	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C1001	ECEA1CKE101	E. CAPACITOR 16V 100U	1	
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1003	ECEA1CKE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1005	ECEA0JKS220	E. CAPACITOR 6.3V 22U	1	
C1006	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1007	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1009	ECEA1AKS220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1010	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1011	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1012	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1013	ECEA0JKS220	E. CAPACITOR 6.3V 22U	1	
C2001	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2004	ECUM1H223KBN	C. CAPACITOR CH 50V 0.022U	1	
C2005	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2006	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2007	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C2008	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2009	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2010	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C2011	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2012	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C2013	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2015	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2016, 17	ECEA1EKS3R3	E. CAPACITOR 25V 3.3U	2	
C2018	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C2019, 20	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2021, 22	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C2023	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2024, 25	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	2	
C2026	ECEA1HKSR22	E. CAPACITOR 50V 0.22U	1	
C2027	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2028	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C2029	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2030, 31	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	2	
C2032	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2033	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C2035	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C2036	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2037	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2038-40	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	3	
C2041, 42	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	2	
C2043, 44	ECUM1C474ZFN	C. CAPACITOR CH 16V 0.47U	2	
C2045	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2046	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C2047-49	ECEA1VKS4R7	E. CAPACITOR 35V 4.7U	3	
C2050	ECUM1H473ZFN	C. CAPACITOR CH 50V 0.047U	1	
C2051	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C2052	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2053	ECEA1HKAR47	E. CAPACITOR 50V 0.47U	1	
C2054	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2055	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2056	ECQV1H104JM	P. CAPACITOR 50V 0.1U	1	
C2057, 58	ECEA1HKS0R1	E. CAPACITOR 50V 0.1U	2	
C2059	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C2061	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3001	ECUM1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3002	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C3003	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3006	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3007	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C3008	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3009	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3010	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3017, 18	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C3019	ECUM1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3021	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3023	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3024	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C3027	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3028	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C3029	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3031	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3032	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3033	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3055	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3057	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3061	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3062	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3064	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C3065	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3066	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C4004	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4005	ECCD2H181J	C. CAPACITOR 500V 180P	1	
C4006	ECEA1CKA330	E. CAPACITOR 16V 33U	1	
C4007	ECUM1H153KBN	C. CAPACITOR CH 50V 0.015U	1	
C4009	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4011	ECQP1362JZ	P. CAPACITOR 100V 3600P	1	[SUPPLIED FROM MBV]
C4017	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4018-20	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	3	
C4021, 22	ECUM1H153KBN	C. CAPACITOR CH 50V 0.015U	2	
C4023	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C4024	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4025, 26	ECEA1CKA220	E. CAPACITOR 16V 22U	2	
C4027	ECEA1HKS3R3	E. CAPACITOR 50V 3.3U	1	
C4028	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4029, 30	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	2	
C4031	ECEA1AKA101	E. CAPACITOR 10V 100U	1	
C4032	ECUM1H822KBN	C. CAPACITOR CH 50V 8200P	1	
C4033, 34	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	2	
C4038	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4039	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C4040	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4042	ECUM1H222JCN	C. CAPACITOR CH 50V 2200P	1	
C4044	ECEA1HKA4R7	E. CAPACITOR 50V 4.7U	1	
C4501	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C4502	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4503	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4506	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4507	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4508	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	
C4509	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4510	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4513	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C4514	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4515	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4521	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4522	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4530	ECA0JAK470X	E. CAPACITOR 6.3V 47U	1	[SUPPLIED FROM MBV]
C4533	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4537	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4538	ECA1HAKR47X	E. CAPACITOR 50V 0.47U	1	[SUPPLIED FROM MBV]
C4541	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4551	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4556	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4558	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4559	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4560	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4565	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4560	ECUX1C104ZFY	C. CAPACITOR CH 16V 0.1U	1	
C4572	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4576	*ECUV1H473KBN*	*C. CAPACITOR CH 50V 0.047U*	*1*	
C4585, 86	ECA0JAK101X	E. CAPACITOR 6.3V 100U	2	[SUPPLIED FROM MBV]
C4587	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4591	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4592	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4673	ECUX1C104ZFY	C. CAPACITOR CH 16V 0.1U	1	
C4674	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4676	ECA1VAK470X	E. CAPACITOR 35V 47U	1	[SUPPLIED FROM MBV]
C4677	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C6001	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6002	ECUV1C224ZFN	C. CAPACITOR CH 16V 0.22U	1	
C6003	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C6004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C6005	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C6006	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6007	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C6008	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C6009	ECUV1H150JCN	C. CAPACITOR CH 50V 15P	1	
C6010	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6013, 14	ECUV1H271JCN	C. CAPACITOR CH 50V 270P	2	
C6015	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6016	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6018	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7302	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7304	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7308	ECUV1H181JCN	C. CAPACITOR CH 50V 180P	1	
C7309	ECUV1H152KBN	C. CAPACITOR CH 50V 1500P	1	
C7310	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7311	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C7312	ECQB1H103JZ	P. CAPACITOR 50V 0.01U	1	
C7313	ECQV1H104JZ	P. CAPACITOR 50V 0.1U	1	
C7314, 15	ECQB1H103JZ	P. CAPACITOR 50V 0.01U	2	
C7320, 21	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C7323, 24	ECUV1H153KBN	C. CAPACITOR CH 50V 0.015U	2	
C7325	ECUX1H223KBV	C. CAPACITOR CH 50V 0.022U	1	
C7326	ECEA1CKN100	E. CAPACITOR 16V 10U	1	
C7328	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7330	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7332, 33	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	2	
C7337	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7338	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7340	ECUV1H390JCN	C. CAPACITOR CH 50V 39P	1	
C7341	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C7345	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7346	ECUV1H390JCN	C. CAPACITOR CH 50V 39P	1	
C7347	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C7349, 50	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	2	
C7352	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7353	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7601	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7604	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7605	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7606	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C7608	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
C7609	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7610	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7612	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7614	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7615	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7701	ECUV1H150JCN	C. CAPACITOR CH 50V 15P	1	
C7702	ECUV1H080DCN	C. CAPACITOR CH 50V 8P	1	
C7704, 05	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7706	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7707-10	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	4	
C7712	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7713	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7714	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7715	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7716	ECUV1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7718	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7721	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7722	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7723	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7724	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7726	VLQ0509J121	COIL 120UH	1	
C7728	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7731	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7732	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C7734	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7736	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7737	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7738, 39	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7743	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7747	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7750	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7751	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7752	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7753, 54	ECUV1H221JCN	C. CAPACITOR CH 50V 220P	2	
C7755-57	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	3	
C7758	ECUV1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7759, 60	ECUV1H101JCN	C. CAPACITOR CH 50V 100P	2	
D302, 03	1SS355	DIODE	2	
D305	1SS355	DIODE	1	
D313, 14	1SS355	DIODE	2	
D318	1SS355	DIODE	1	
D319	MA151K	DIODE	1	
D320	MA151WK	DIODE	1	
D321	1SS355	DIODE	1	
D802-04	1SS355	DIODE	3	
D1001	MA4051-L	DIODE	1	
D1003	MA4120-M	DIODE	1	
D1004	MA4051-L	DIODE	1	
D1005	1SS355	DIODE	1	
D1007, 08	1SS355	DIODE	2	
D1009	1SS254	DIODE	1	
D2001	MA153	DIODE	1	
D2002	MA151K	DIODE	1	
D2003-05	1SS355	DIODE	3	
D2006, 07	MA700	DIODE	2	
D2008, 09	MA185	DIODE	2	
D2010-13	1SS355	DIODE	4	
D3001, 02	1SS254	DIODE	2	
D3005	MA723-VT	DIODE	1	
D4003-05	1SS254	DIODE	3	
D4007	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
D4504	1SS254	DIODE	1	
D6001	LN68LT.VT	LED	1	
D6002	MA4075-L	DIODE	1	
D6003	MA151K	DIODE	1	
D7304	MA29T-B	DIODE	1	
D7305	1SS254	DIODE	1	
D7307	MA151K	DIODE	1	
D7601	MA4300-M	DIODE	1	
D7602, 03	1SS254	DIODE	2	
D7704	MA700A	DIODE	1	
D7705	1SS254	DIODE	1	
D7707	1SS254	DIODE	1	
IC301	TDA9725V2	IC	1	[SUPPLIED FROM MBV]
IC302	TL8850AF	IC	1	
IC0701	LA7576	IC	1	
IC1001	HA17431PA	IC	1	
IC2001	BA6887-V3	IC	1	
IC2002	BA6871BS	IC	1	
IC2003	AN3814K	IC	1	
IC4001	BA7795FS	IC	1	
IC4501	BH7778AK	IC	1	
IC6001	MN675530VRBY	IC	1	[SUPPLIED FROM MBV]
IC6002, 03	ON1387	PHOTO INTERRUPTER	2	
IC7301	TDA8845	IC	1	
IC7302	TA8721SN	IC	1	
IC7701	M27C1001BAAA	IC	1	[SUPPLIED FROM MBV]
IC7702	MC74HCT573AF	IC	1	[SUPPLIED FROM MBV]
IC7703	NJM2535M	IC	1	[SUPPLIED FROM MBV]
IC7704	ST24W16FB6	IC	1	[SUPPLIED FROM MBV]
IC7705	BH7236AF	IC	1	
IC7706	SABC513AL16P	IC	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC7708	SAA5281ZPM3	IC	1	
IC7712	MC74HCT74AD	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001	VSF0015A10	IC PROTECTOR	1	
K300	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K310	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0702	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0704, 05	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
K3001	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K3005	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K3014, 15	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	2	
K4002	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K4004	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K4502-06	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	5	
K6002	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K6006, 07	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	2	
K7302	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K7315	ERJ3GEYJ302	M. RESISTOR CH 1/16W 3K	1	
K7316	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7619	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K7621	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K7624	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K7625	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7709	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
K7711	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	1	
L301	VLQ0509J151	COIL 150UH	1	
L302, 03	VLQ0509J100	COIL 10UH	2	
L304	VLQ0509J390	COIL 39UH	1	
L305	VLQ0509J470	COIL 47UH	1	
L306	VLQ0509J101	COIL 100UH	1	
L307	VLQ0509J270	COIL 27UH	1	
L308	VLQ0509J100	COIL 10UH	1	
L309	VLQ0509J470	COIL 47UH	1	
L311, 12	VLQ0509J680	COIL 68UH	2	
L313, 14	VLQ0509J390	COIL 39UH	2	
L315	VLQ0509J101	COIL 100UH	1	
L0701	VLQ0163JR18	COIL 0.18UH	1	[SUPPLIED FROM MBV]
L0705	VLQ0163J5R6	COIL 5.6UH	1	
L0706	VLQEL063150K	COIL 15UH	1	
L801	VLQ0509J101	COIL 100UH	1	
L2001	VLP0083	COIL	1	
L3001	VLQ0509J820	COIL 82UH	1	
L3002	VLQ0509J151	COIL 150UH	1	
L3003	VLQ0509J6R8	COIL 6.8UH	1	
L3004	VLQ0509J120	COIL 12UH	1	
L3005	VLQ0509J101	COIL 100UH	1	
L3006	VLQ0509J270	COIL 27UH	1	
L3008	VLQ0509J680	COIL 68UH	1	
L3012	VLQ0509J680	COIL 68UH	1	
L4002	ELESN471KA	INDUCTOR 470UH	1	
L4003	VLQ0509J680	COIL 68UH	1	
L4005, 06	ERJ6GNZ0R00	M. RESISTOR CH 1/10W 0	2	
L4007	VLQ0123	COIL	1	
L6001	VLQ0509J101	COIL 100UH	1	
L6002	VLP0083	COIL	1	
L6003, 04	VLQ0509J680	COIL 68UH	2	
L7603, 04	VLQ0509J680	COIL 68UH	2	
L7606	VLQ0509J180	COIL 18UH	1	
L7607, 08	VLQ0509J330	COIL 33UH	2	
L7702	VLQ0509J3R3	COIL 3.3UH	1	
L7703	VLQ0509J270	COIL 27UH	1	
L7704	VLQ0509J100	COIL 10UH	1	
L7705	VLQ0509J390	COIL 39UH	1	
L7707	VLQ0509J120	COIL 12UH	1	
L7708	VLQ0509J150	COIL 15UH	1	
LB303-06	VLP0145	COIL	4	
LB307-11	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	5	
LB312	VLP0145	COIL	1	
LB1001	VLP0125	COIL	1	
LB3001	VLP0083	COIL	1	
P2001	VJS3640A002	CONNECTOR (FEMALE) 2P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P2002	VJS3537A0150	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3483	CONNECTOR (MALE) 3P	1	
P2005	VJS3537A0090	CONNECTOR (FEMALE) 9P	1	
P3002	VJS3537A0200	CONNECTOR (FEMALE) 20P	1	
P4002	VJS3675E0060	CONNECTOR (FEMALE) 6P	1	
P4003	VJP1230T	CONNECTOR (MALE) 3P	1	
P6001	VJS3821	CONNECTOR (FEMALE) 4P	1	
PK301	VJR0776B010W	CONNECTOR (MALE) 10P	1	[SUPPLIED FROM MBV]
PK302	VJR0776B011W	CONNECTOR (MALE) 11P	1	[SUPPLIED FROM MBV]
PK303	VJR0776B012W	CONNECTOR (MALE) 12P	1	[SUPPLIED FROM MBV]
PK304	VJR0776B003W	CONNECTOR (MALE) 3P	1	
PK0701	VJR0816E010W	CONNECTOR (MALE) 10P	1	
PK4501	VJR0777B008W	CONNECTOR (MALE) 8P	1	
PK4502, 03	VJR0777B010W	CONNECTOR (MALE) 10P	2	
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
PK7302	VJR0777B005W	CONNECTOR (MALE) 5P	1	
PP0701	VJP3580A004B	CONNECTOR (MALE) 4P	1	
PP3002	VJP3042B013W	CONNECTOR (MALE) 13P	1	
PP3003	VJP3042B005W	CONNECTOR (MALE) 5P	1	
PP3004	VJP3042B008W	CONNECTOR (MALE) 8P	1	
PP3005	VJP3042B010W	CONNECTOR (MALE) 10P	1	
PS3001	VJS3673F0050	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
PS3005	VJS3631A011A	CONNECTOR (FEMALE) 11P	1	
PS6002	VJS3673B0250	CONNECTOR (FEMALE) 25P	1	
Q301, 02	MSD601	TRANSISTOR	2	
Q305	MSD601	TRANSISTOR	1	
Q306	MSB709	TRANSISTOR	1	
Q307	MSB709-R	TRANSISTOR	1	
Q308	MSB709	TRANSISTOR	1	
Q309	MSC2295	TRANSISTOR	1	
Q310	MSD601	TRANSISTOR	1	
Q0701	MSD601-S	TRANSISTOR	1	
Q0702	MSB709-R	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q803	MSC2295	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q805	MSD601	TRANSISTOR	1	
Q1001	MSD601	TRANSISTOR	1	
Q1002-04	2SD1996-S	TRANSISTOR	3	
Q1005	2SD602A-R	TRANSISTOR	1	
Q1006	2SD1996-S	TRANSISTOR	1	
Q1007	2SD2544OPQA	TRANSISTOR	1	
Q3001	MSC2295	TRANSISTOR	1	
Q3002	MSB709	TRANSISTOR	1	
Q3003, 04	MSD601	TRANSISTOR	2	
Q3005	MSC2295	TRANSISTOR	1	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSC2295	TRANSISTOR	1	
Q3010	MSB709-R	TRANSISTOR	1	
Q3023	MSC2295	TRANSISTOR	1	
Q3024	MSD601	TRANSISTOR	1	
Q3025	MSC2295	TRANSISTOR	1	
Q4005	2SB1320A-R	TRANSISTOR	1	
Q4006	2SD602A-R	TRANSISTOR	1	
Q4007-09	MSD601-R	TRANSISTOR	3	
Q4501	2SD1468	TRANSISTOR	1	
Q4551	2SA1515	TRANSISTOR	1	
Q6001	MSB709	TRANSISTOR	1	
Q6002, 03	PN205LT-NCVT	PHOTO TRANSISTOR	2	
Q7301	MSD601-S	TRANSISTOR	1	
Q7601	XN4601	TRANSISTOR-TRANSISTOR	1	
Q7602	MSD601	TRANSISTOR	1	
Q7603	2SB710A	TRANSISTOR	1	
Q7702	MSB709	TRANSISTOR	1	
Q7704, 05	MSD601	TRANSISTOR	2	
Q7706	MSB709	TRANSISTOR	1	
Q7707-12	MSD601	TRANSISTOR	6	
QR302	UN2113	TRANSISTOR-RESISTOR	1	
QR304	UN2113	TRANSISTOR-RESISTOR	1	
QR305	UN2213	TRANSISTOR-RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
QR311	MUN2113	TRANSISTOR-RESISTOR	1	
QR317	MUN2213	TRANSISTOR-RESISTOR	1	
QR319	UN2210	TRANSISTOR-RESISTOR	1	
QR801	MUN2213	TRANSISTOR-RESISTOR	1	
QR1001, 02	MUN2113	TRANSISTOR-RESISTOR	2	
QR1003	MUN2213	TRANSISTOR-RESISTOR	1	
QR3001	MUN2111	TRANSISTOR-RESISTOR	1	
QR3002, 03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR3027	MUN2212	TRANSISTOR-RESISTOR	1	
QR4001	MUN2212	TRANSISTOR-RESISTOR	1	
QR4651, 52	UN5213	TRANSISTOR-RESISTOR	2	
QR6001	XN1211	TRANSISTOR-RESISTOR	1	
QR6002	UN2114	TRANSISTOR-RESISTOR	1	
QR6004	XN1213	TRANSISTOR-RESISTOR	1	
QR6005	MUN2112	TRANSISTOR-RESISTOR	1	
QR7304	MUN2213	TRANSISTOR-RESISTOR	1	
QR7601	MUN2213	TRANSISTOR-RESISTOR	1	
QR7602	MUN2212	TRANSISTOR-RESISTOR	1	
QR7603	MUN2213	TRANSISTOR-RESISTOR	1	
QR7703	MUN2113	TRANSISTOR-RESISTOR	1	
R303	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R304	ERJ3GEYJ225	M. RESISTOR CH 1/16W 2.2M	1	
R305	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R307	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R308	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R309	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R310, 11	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	2	
R312	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R313	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R314	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R315	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R316	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R317	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R318	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R320	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R321	ERJ3GEYJ120	M. RESISTOR CH 1/16W 12	1	
R322	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R323	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R324, 25	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R326	ERJ3GEYJ242	M. RESISTOR CH 1/16W 2.4K	1	
R327	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R328	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R329	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R330	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R332	ERJ3GEYJ390	M. RESISTOR CH 1/16W 39	1	
R333	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R335	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R337	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R338	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R339	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R340	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R341	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R344	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R346, 47	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R353	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R354	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R355	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R356, 57	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	2	
R359	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R360	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R369	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R373	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R374	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R375	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R376	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0704	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R0705	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R0706, 07	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	2	
R0708	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R0709	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R0710	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1	
R0713	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R0714	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0715	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R0716	VRE0040E151	M. RESISTOR CH 1/10W 150	1	
R0717	ERJ3GEYJ330	M. RESISTOR CH 1/16W 33	1	
R0718	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R0719	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R0720	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R0722	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R0728	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R0729	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R0732	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R0783	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R801	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R802	ERJ3GEYG681	M. RESISTOR CH 1/16W 680	1	
R803	ERJ3GEYG182	M. RESISTOR CH 1/16W 1.8K	1	
R810	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R811	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R812	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R813	ERJ3GEYG561	M. RESISTOR CH 1/16W 560	1	(SUPPLIED FROM MBV)
R814	ERJ3GEYG103	M. RESISTOR CH 1/16W 10K	1	
R815	ERJ3GEYG681	M. RESISTOR CH 1/16W 680	1	
R816	ERJ3GEYG181	M. RESISTOR CH 1/16W 180	1	
R817	ERJ3GEYG101	M. RESISTOR CH 1/16W 100	1	(SUPPLIED FROM MBV)
R818	ERJ3GEYG242	M. RESISTOR CH 1/16W 2.4K	1	
R1001	ERJ6GEYG333	M. RESISTOR CH 1/10W 33K	1	
R1002	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R1003	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R1004	ERJ6GEYJ363	M. RESISTOR CH 1/10W 36K	1	
R1005	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R1006	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R1007	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R1008	ERJ6GEYG333	M. RESISTOR CH 1/10W 33K	1	
R1009, 10	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	2	
R1011	ERDS1TJ272	C. RESISTOR 1/2W 2.7K	1	
R2001	ERJ6GEYG913	M. RESISTOR CH 1/10W 91K	1	
R2002-04	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3	
R2005	ERX1SJ1R8	M. RESISTOR 1W 1.8	1	
R2006	ERJ6GEYG512	M. RESISTOR CH 1/10W 5.1K	1	
R2007	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R2009, 10	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R2011	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R2012	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R2013	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R2014, 15	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2016	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R2017, 18	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2019	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R2020	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	1	
R2021	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R2022	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R2023	ERQS2CKB8200	M. RESISTOR 1/4W 820	1	
R2024	ERQS2CKB6800	M. RESISTOR 1/4W 680	1	
R2025	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R2026, 27	ERDS2TJ560	C. RESISTOR 1/4W 56	2	
R2028	ERDS1TJ561	C. RESISTOR 1/2W 560	1	
R2029	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R2030	ERJ6GEYG432	M. RESISTOR CH 1/10W 4.3K	1	
R2031	ERJ6GEYG473	M. RESISTOR CH 1/10W 47K	1	
R2032	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R2034	ERJ6GEYG133	M. RESISTOR CH 1/10W 13K	1	
R2035	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R2036, 37	ERJ6GEYG472	M. RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R2039, 40	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	2	
R2041, 42	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	2	
R2043	ERDS2TJ560	C. RESISTOR 1/4W 56	1	
R2044	ERX12SJR47	M. RESISTOR 1/2W 0.47	1	
R2045	ERDS2FJ1R5	C. RESISTOR 1/4W 1.5	1	
R2046-48	ERDS2TJ330	C. RESISTOR 1/4W 33	3	
R2049	ERDS2FJ1R2	C. RESISTOR 1/4W 1.2	1	
R2050, 51	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R2052	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R3001	ERJ6GEYG561	M. RESISTOR CH 1/10W 560	1	
R3002	ERJ6GEYG472	M. RESISTOR CH 1/10W 4.7K	1	
R3003	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3004	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3005	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R3006	ERDS2TJ472	C. RESISTOR 1/4W 4.7K	1	
R3007	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R3008	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3009	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
R3012	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3015	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3018	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3019, 20	ERJ6GEYG561	M. RESISTOR CH 1/10W 560	2	
R3021	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R3022	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3023, 24	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	2	
R3025	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R3026	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3029	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3030	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3032	ERJ6GEYG334	M. RESISTOR CH 1/10W 330K	1	
R3033	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3034	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3037	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3038	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3066	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3068, 69	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3076, 77	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3078	ERDS2T0	C. RESISTOR 1/4W 0	1	
R3079, 80	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3081	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R3082	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R3083	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3084	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R3085	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3087	ERJ6GEYG563	M. RESISTOR CH 1/10W 56K	1	
R4003	ERJ6GEYG100	M. RESISTOR CH 1/10W 10	1	
R4007	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R4011	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R4012	ERJ6GEYG123	M. RESISTOR CH 1/10W 12K	1	
R4013	ERJ6GEYJ163	M. RESISTOR CH 1/10W 16K	1	
R4014	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R4015	ERJ6GEYG333	M. RESISTOR CH 1/10W 33K	1	
R4016	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R4017	ERJ6GEYG133	M. RESISTOR CH 1/10W 1.3K	1	
R4019	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R4020	ERJ6GEYG123	M. RESISTOR CH 1/10W 12K	1	
R4021	ERJ6GEYG393	M. RESISTOR CH 1/10W 39K	1	
R4022	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R4023	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R4024	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R4025	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1	
R4026	ERJ6GEYG473	M. RESISTOR CH 1/10W 47K	1	
R4027, 28	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R4029	ERJ6GEYG912	M. RESISTOR CH 1/10W 9.1K	1	
R4030	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4031	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R4032	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R4033	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R4034	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R4035, 36	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R4037	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R4038	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R4039	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R4040	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4041, 42	ERJ6GEYG393	M. RESISTOR CH 1/10W 39K	2	
R4043	ERG2SJ821	M. RESISTOR 2W 820	1	
R4044	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4048	ERJ6GEYG473	M. RESISTOR CH 1/10W 47K	1	
R4049	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1	
R4050	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R4051	ERJ6GEYG822	M. RESISTOR CH 1/10W 8.2K	1	
R4054	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4055	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R4056	ERJ6GEYG393	M. RESISTOR CH 1/10W 39K	1	
R4057	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R4058	ERJ6GEYG472	M. RESISTOR CH 1/10W 4.7K	1	
R4059	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4067, 68	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R4071	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4073	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R4503	ERJ3RBD203	M. RESISTOR CH 1/16W 20K	1	
R4504	ERJ3GEYG224	M. RESISTOR CH 1/16W 220K	1	
R4508	ERJ3GEYG224	M. RESISTOR CH 1/16W 220K	1	
R4512	ERJ3RBD123	M. RESISTOR CH 1/16W 12K	1	
R4513	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4517, 18	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R4519, 20	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4522	ERJ3GEYK225	M. RESISTOR CH 1/16W 2.2M	1	
R4528	ERJ3RBD153	M. RESISTOR CH 1/16W 15K	1	
R4529	ERJ3GEYG562	M. RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4542	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R4562	ERJ3RBD912	M. RESISTOR CH 1/16W 9.1K	1	
R4583	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R4584	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4585	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R4586	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4588	ERJ6RED124	M. RESISTOR CH 1/10W 120K	1	
R4589	ERJ6RED114	M. RESISTOR CH 1/10W 110K	1	
R4601	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4603, 04	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R4605	ERJ6GEYG203	M. RESISTOR CH 1/10W 20K	1	
R4606	ERJ3GEYJ203	M. RESISTOR CH 1/16W 20K	1	
R4607	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4608	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R4621	ERJ6GEYG163	M. RESISTOR CH 1/10W 16K	1	
R4623	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R4624	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4641, 42	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4663, 64	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4685	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4687	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R4688	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R4704	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R6001	ERJ6GEYJ201	M. RESISTOR CH 1/10W 200	1	
R6002	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R6003-05	ERJ6GEYG333	M. RESISTOR CH 1/10W 33K	3	
R6006, 07	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
R6008	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R6009	ERJ6GEYG163	M. RESISTOR CH 1/10W 16K	1	
R6010	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R6011	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R6012, 13	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R6014	ERJ6GEYG473	M. RESISTOR CH 1/10W 47K	1	
R6015	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R6016	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	1	
R6017	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R6019	ERDS2TJ473	C. RESISTOR 1/4W 47K	1	
R6020	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R6021-23	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	3	
R6024	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R6025	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R6026	ERJ6GEYG473	M. RESISTOR CH 1/10W 47K	1	
R6027	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R6028	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
R6029, 30	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	2	
R6033	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R6034	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R6035, 36	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R6037, 38	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R6039	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
R6040, 41	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R6043	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R6044	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R6046	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R6048	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R6049	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R6050	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R6052	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R6054	ERJ6GEYG472	M. RESISTOR CH 1/10W 4.7K	1	
R6055	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6056-58	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	3	
R6059	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R6060	ERJ6GEYJ822	M. RESISTOR CH 1/10W 8.2K	1	
R6061	ERJ6GEYJ243	M. RESISTOR CH 1/10W 24K	1	
R7302	ERJ3GEYJ133	M. RESISTOR CH 1/16W 13K	1	
R7303	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R7304	ERJ3GEYJ392	M. RESISTOR CH 1/16W 3.9K	1	
R7306	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R7307	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R7311	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7313	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R7320	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R7323	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4.7K	1	
R7324, 25	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	2	
R7326	ERJ3GEYJ113	M. RESISTOR CH 1/16W 11K	1	
R7327	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R7328	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7329	ERJ3GEYJ332	M. RESISTOR CH 1/16W 3.3K	1	
R7330	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7331	ERJ3GEYJ113	M. RESISTOR CH 1/16W 11K	1	
R7336	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R7337	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	1	
R7345	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R7352, 53	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R7354, 55	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	2	
R7358, 59	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R7362, 63	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R7601	ERJ6GEYJ151	M. RESISTOR CH 1/10W 150	1	
R7602, 03	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R7604	ERJ6GEYJ151	M. RESISTOR CH 1/10W 150	1	
R7605-07	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	3	
R7612	ERG2SJ331	M. RESISTOR 2W 330	1	
R7614	ERJ6GEYJ561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R7616	ERG2SJ331	M. RESISTOR 2W 330	1	
R7618	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7619	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R7622, 23	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R7624	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R7625	ERJ6GEYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R7626	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R7703, 04	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	2	
R7705	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R7706	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
R7707	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R7708	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7709	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7711	ERJ6GEYJ122	M. RESISTOR CH 1/10W 1.2K	1	
R7712, 13	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R7714-19	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	6	
R7722, 23	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	2	
R7725	ERJ6GEYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R7726	ERJ6GEYJ273	M. RESISTOR CH 1/10W 27K	1	
R7727	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7732	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7733	ERJ6GEYJ104	M. RESISTOR CH 1/10W 100K	1	
R7735	ERJ6GEYJ104	M. RESISTOR CH 1/10W 100K	1	
R7736	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7737, 38	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7739	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R7740	ERJ6GEYJ911	M. RESISTOR CH 1/10W 910	1	
R7746	ERJ6GEYJ182	M. RESISTOR CH 1/10W 1.8K	1	
R7747	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7750	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7751	ERJ6GEYJ392	M. RESISTOR CH 1/10W 3.9K	1	
R7756	ERJ6GEYJ473	M. RESISTOR CH 1/10W 47K	1	
R7757	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	1	
R7758	ERJ6GEYJ273	M. RESISTOR CH 1/10W 27K	1	
R7761	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
R7766-68	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	3	
R7769	ERJ6GEYJ273	M. RESISTOR CH 1/10W 27K	1	
R7770	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R7771	ERJ6GEYJ104	M. RESISTOR CH 1/10W 100K	1	
R7772	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R7773	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7774	ERJ6GEYJ104	M. RESISTOR CH 1/10W 100K	1	
R7775	ERJ6GEYJ473	M. RESISTOR CH 1/10W 47K	1	
R7776	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R7777	ERJ6GEYK225	M. RESISTOR CH 1/10W 2.2M	1	
R7778	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R7779	ERJ6GEYJ153	M. RESISTOR CH 1/10W 15K	1	
R7780	ERJ6GEYJ271	M. RESISTOR CH 1/10W 270	1	
R7781	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R7782	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	1	
R7785	ERJ6GEYJ101	M. RESISTOR CH 1/10W 100	1	
R7786, 87	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7788	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R7789	ERJ6GEYJ154	M. RESISTOR CH 1/10W 150K	1	
R7790	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R7791	ERJ6GEYJ122	M. RESISTOR CH 1/10W 1.2K	1	
R7792	ERJ6GEYJ821	M. RESISTOR CH 1/10W 820	1	
R7793	ERJ6GEYJ182	M. RESISTOR CH 1/10W 1.8K	1	
RX7701	EXBF9E103J	RESISTOR-RESISTOR	1	
S6001	YES0700	SWITCH	1	
T0703	EQV5EC071A	TRANSFORMER	1	
T0704	EQV5EC072A	TRANSFORMER	1	
T4002	EI070F0140	TRANSFORMER	1	
T7301	EQR700028P	TRANSFORMER	1	
T7304	EI55EC017A	TRANSFORMER	1	
T7305	EQ55EC033A	TRANSFORMER	1	
⚠ TU7601	EN84725061	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B24	V. RESISTOR 20K	1	
VR2001	EVNCYAA03B54	V. RESISTOR 50K	1	
VR3001, 02	EVNCYAA03B23	V. RESISTOR 2K	2	
VR3012, 13	EVNCYAA03B52	V. RESISTOR 500	2	
VR3014	EVNCYAA03B54	V. RESISTOR 50K	1	
VR4001	EVNCYAA03B15	V. RESISTOR 100K	1	
VR4501	EVNECSA00B53	V. RESISTOR 6.8K	1	
VR4508	EVNECSA00B53	V. RESISTOR 5K	1	
VR4550	EVNECSA00B14	V. RESISTOR 10K	1	
VR7301	EVNCBAA00B53	V. RESISTOR 5K	1	
X301	VSX0162	CRYSTAL OSCILLATOR	1	
X0701	VLF1178	FILTER	1	
X0703	EFCS5R5MS5	FILTER	1	
X0704	VLF1368	FILTER	1	[SUPPLIED FROM MBV]
X6001	VSX0683	CRYSTAL OSCILLATOR	1	
X7301	EFCS5R5MS5	FILTER	1	
X7304	EFCS5R74MS5B	FILTER	1	
X7305	VSX0648	CRYSTAL OSCILLATOR	1	
X7702	VSX0353	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMP4894	SUPPORT ANGLE	2	
	VMD2329	PHOTO TRANSISTOR HOLDER	2	
	VMD2328	REEL GUIDE	1	
	VMD2330	LED HOLDER	1	
	VMP4894	SUPPORT ANGLE	1	FOR DECODER C.B.A.
	VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODULATOR C.B.A.
■	VEP06B976	MAIN C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625B
C301	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C302	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C305	ECUX1H102BCV	C. CAPACITOR CH 50V 1000P	1	[SUPPLIED FROM MBV]
C306	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C307	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C308	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C310	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C311	ECUM1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C312	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C313	ECUX1H681BCV	C. CAPACITOR CH 50V 680P	1	[SUPPLIED FROM MBV]
C314	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C315	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C316	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C317	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C318	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C319	ECUX1H222KBV	C. CAPACITOR CH 50V 2200P	1	
C320	ECUX1C333KBV	C. CAPACITOR CH 16V 0.033U	1	
C321	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C322	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C323	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C324	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C325	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C327	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C328	ECUX1H080DCV	C. CAPACITOR CH 50V 8P	1	
C329	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C330	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C331	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C332	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C333	ECUX1H060DCV	C. CAPACITOR CH 50V 6P	1	
C334	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C335	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C336	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C337	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C338	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C339	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C340	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C341	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C342	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C343	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C344	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C345, 46	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C347	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C348	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C349	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C350	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C351	ECUX1H392KBV	C. CAPACITOR CH 50V 3900P	1	
C352	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C353	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C354	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C355	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C356	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C357	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C358	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	1	
C361	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C362	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C363	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C365, 66	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C370	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C371	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C372, 73	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	2	
C374	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C375	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C376	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C378	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C379, 80	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C381	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C0701, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0704	ECUX1H331JCV	C. CAPACITOR CH 50V 330P	1	
C0706	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0707, 08	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0709	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0710	ECUX1H470JPV	C. CAPACITOR CH 50V 47P	1	
C0711	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C0712	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0714	ECQB1H473JF	P. CAPACITOR 50V 0.047U	1	
C0715	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C0716	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C0717	ECUX1H270JPV	C. CAPACITOR CH 50V 27P	1	
C0718	ECEA1HKSR47	E. CAPACITOR 50V 0.47U	1	
C0719	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C0720	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0723	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0729	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0730	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0732	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C801	ECEA1CKA100	E. CAPACITOR 16V 10U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C802	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C803	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C804	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C805	ECUX1H050CCV	C. CAPACITOR CH 50V 5P	1	
C806	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C807	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C1001	ECEA1CKE101	E. CAPACITOR 16V 100U	1	
C1002	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1003	ECEA1CKE470	E. CAPACITOR 16V 47U	1	
C1004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1005	ECEA0JKS220	E. CAPACITOR 6.3V 22U	1	
C1006	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1007	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1008	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1009	ECEA1AKS220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1010	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1011	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1012	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1013	ECEA0JKS220	E. CAPACITOR 6.3V 22U	1	
C2001	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2002, 03	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2004	ECUM1H223KBN	C. CAPACITOR CH 50V 0.022U	1	
C2005	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2006	ECUM1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2007	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C2008	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2009	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2010	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C2011	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2012	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C2013	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2014	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2015	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2016, 17	ECEA1EKN3R3	E. CAPACITOR 25V 3.3U	2	
C2018	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C2019, 20	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2021, 22	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C2023	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2024, 25	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	2	
C2026	ECEA1HKNR22	E. CAPACITOR 50V 0.22U	1	
C2027	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2028	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C2029	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2030, 31	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	2	
C2032	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2033	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C2035	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C2036	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2037	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2038-40	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	3	
C2041, 42	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	2	
C2043, 44	ECUM1C474ZFN	C. CAPACITOR CH 16V 0.47U	2	
C2045	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2046	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C2047-49	ECEA1VKN4R7	E. CAPACITOR 35V 4.7U	3	
C2050	ECUM1H473ZFN	C. CAPACITOR CH 50V 0.047U	1	
C2051	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C2052	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2053	ECEA1HKAR47	E. CAPACITOR 50V 0.47U	1	
C2054	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2055	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2056	ECQV1H104JM	P. CAPACITOR 50V 0.1U	1	
C2057, 58	ECEA1HKS0R1	E. CAPACITOR 50V 0.1U	2	
C2059	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C2061	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3001	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C3002	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C3003	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3006	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3007	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C3008	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3009	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3010	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3017, 18	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3018	ECUM1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3021	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3023	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3024	ECUM1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C3027	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3028	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C3029	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3031	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3032	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3033	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3055	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3057	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3061	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3062	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3064	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C3065	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3066	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C4004	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4005	ECCD2H181J	C. CAPACITOR 500V 180P	1	
C4006	ECEA1CKA330	E. CAPACITOR 16V 33U	1	
C4007	ECUM1H153KBN	C. CAPACITOR CH 50V 0.015U	1	
C4008	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4011	ECQP1362JZ	P. CAPACITOR 100V 3600P	1	[SUPPLIED FROM MBV]
C4017	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4018-20	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	3	
C4021, 22	ECUM1H153KBN	C. CAPACITOR CH 50V 0.015U	2	
C4023	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C4024	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4025, 26	ECEA1CKA220	E. CAPACITOR 16V 22U	2	
C4027	ECEA1HKS3R3	E. CAPACITOR 50V 3.3U	1	
C4028	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4029, 30	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	2	
C4031	ECEA1AKA101	E. CAPACITOR 10V 100U	1	
C4032	ECUM1H822KBN	C. CAPACITOR CH 50V 8200P	1	
C4033, 34	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	2	
C4038	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4039	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C4040	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4042	ECUM1H222JCN	C. CAPACITOR CH 50V 2200P	1	
C4044	ECEA1HKA4R7	E. CAPACITOR 50V 4.7U	1	
C4501	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C4502	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4503	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4506	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4507	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4508	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	
C4509	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4510	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4513	ECUM1H681JCN	C. CAPACITOR CH 50V 680P	1	
C4514	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4515	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4521	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4522	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4530	ECA0JAK470X	E. CAPACITOR 6.3V 47U	1	[SUPPLIED FROM MBV]
C4533	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4537	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4538	ECA1HAKR47X	E. CAPACITOR 50V 0.47U	1	[SUPPLIED FROM MBV]
C4541	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4551	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4556	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4558	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4559	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4560	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4565	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4569	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C4572	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4576	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4585, 86	ECA0JAK101X	E. CAPACITOR 6.3V 100U	2	[SUPPLIED FROM MBV]
C4587	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4591	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4592	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4673	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C4674	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4676	ECA1VAK470X	E. CAPACITOR 35V 47U	1	[SUPPLIED FROM MBV]
C4677	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C6001	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6002	ECUM1C224ZFN	C. CAPACITOR CH 16V 0.22U	1	
C6003	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C6004	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C6005	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C6006	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6007	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C6008	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C6009	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
C6010	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6013, 14	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	2	
C6015	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6016	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6018	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7301, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C7303	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7304	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7305	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C7306	ECUX1H391JCV	C. CAPACITOR CH 50V 390P	1	
C7308-12	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	4	
C7313	ECEA0JKA220	E. CAPACITOR 6.3V 22U	1	
C7314	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7315	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C7317, 18	ECUX1H040CCV	C. CAPACITOR CH 50V 4P	2	
C7320	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7321	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7322	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C7323, 24	ECUX1H391JCV	C. CAPACITOR CH 50V 390P	2	
C7325, 26	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C7327	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7328	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7329, 30	ECUX1H471JCV	C. CAPACITOR CH 50V 470P	2	
C7331	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7332, 33	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	2	
C7334	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7335	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7338	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7339	ECUM1H182KBN	C. CAPACITOR CH 50V 1800P	1	
C7340	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7341	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7342	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7343	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7344	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7345	ECUM1H182KBN	C. CAPACITOR CH 50V 1800P	1	
C7346	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7347	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7348	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7350	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7351	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7352	ECUM1H182KBN	C. CAPACITOR CH 50V 1800P	1	
C7353	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7354	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7355	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7357	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7358	ECEA1HKA3R3	E. CAPACITOR 50V 3.3U	1	
C7359	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7365	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7369	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7370	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7371, 72	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C7374, 75	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	2	
C7601	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7604	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7605	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7606	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C7608	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
C7609	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7610	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7612	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7614	ECEA1HKA100	E. CAPACITOR 50V 10U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7615	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7616	ECUM1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C7617	ECEA1AKS221	E. CAPACITOR 10V 220U	1	
C7701	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
C7702	ECUM1H080CCN	C. CAPACITOR CH 50V 8P	1	
C7704, 05	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7706	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7707-10	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	4	
C7712	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7713	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7714	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7715	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7716	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7718	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7721	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7723	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7724	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7726	VLQ0509J121	COIL 120UH	1	
C7729	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7731	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7732	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C7734	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7736	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7737	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7738, 39	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7743	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7747	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7750	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7751	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7752	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7753, 54	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	2	
C7755-57	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3	
C7758	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7759, 60	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
D302, 03	1SS355	DIODE	2	
D305	1SS355	DIODE	1	
D313, 14	1SS355	DIODE	2	
D318	1SS355	DIODE	1	
D319	MA151K	DIODE	1	
D320	MA151WK	DIODE	1	
D321	1SS355	DIODE	1	
D802-04	1SS355	DIODE	3	
D1001	MA4051-L	DIODE	1	
D1003	MA4120-M	DIODE	1	
D1004	MA4051-L	DIODE	1	
D1005	1SS355	DIODE	1	
D1007, 08	1SS355	DIODE	2	
D1009	1SS254	DIODE	1	
D2001	MA153	DIODE	1	
D2002	MA151K	DIODE	1	
D2003-05	1SS355	DIODE	3	
D2006, 07	MA700	DIODE	2	
D2008, 09	MA185	DIODE	2	
D2010-13	1SS355	DIODE	4	
D3001, 02	1SS254	DIODE	2	
D3005	MA723-VT	DIODE	1	
D4003-05	1SS254	DIODE	3	
D4007	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
D4504	1SS254	DIODE	1	
D6001	LN58LT.VT	LED	1	
D6002	MA4075-L	DIODE	1	
D6003	MA151K	DIODE	1	
D7301	MA3082-L	DIODE	1	
D7302	MA151K	DIODE	1	
D7303	MA151WK	DIODE	1	
D7304	MA717	DIODE	1	
D7306	MA151WK	DIODE	1	
D7601	MA4300-M	DIODE	1	
D7704	MA700A	DIODE	1	
D7705	1SS254	DIODE	1	
D7707	1SS254	DIODE	1	
FL7301, 02	VLF0633	FILTER	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC301	TDA9725V2	IC	1	[SUPPLIED FROM MBV]
IC302	TL8850AF	IC	1	
IC0701	LA7576	IC	1	
IC1001	HA17431PA	IC	1	
IC2001	BA6887-V3	IC	1	
IC2002	BA6871BS	IC	1	
IC2003	AN3814K	IC	1	
IC4001	BA7795FS	IC	1	
IC4501	MN7778AK	IC	1	
IC6001	MN675536VRGY	IC	1	[SUPPLIED FROM MBV]
IC6002, 03	ON1387	PHOTO INTERRUPTER	2	
IC7301	MSP3410B-F7	IC	1	[SUPPLIED FROM MBV]
IC7302	PST7043	IC	1	
IC7303	M5230FP	IC	1	
IC7304	HA17431PA	IC	1	
IC7305	MN155402VZDB	IC	1	
IC7306	PST7043	IC	1	
IC7701	M27C1001BAAA	IC	1	[SUPPLIED FROM MBV]
IC7702	MC74HCT573AM	IC	1	[SUPPLIED FROM MBV]
IC7703	NJM2535D	IC	1	[SUPPLIED FROM MBV]
IC7704	ST24W16FB6	IC	1	[SUPPLIED FROM MBV]
IC7705	MN7236AF	IC	1	
IC7706	SABC513AL16P	IC	1	[SUPPLIED FROM MBV]
IC7708	SAA5281ZPM3	IC	1	
IC7712	MC74HCT74AD	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001	VSF0015A10	IC PROTECTOR	1	
K308	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K310	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0702	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0704, 05	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
K1001	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3001	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3005	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K3014, 15	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
K4002	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K4004	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K4502-06	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	5	
K6003	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K6006, 07	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	2	
K7305-07	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	3	
K7314	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K7317	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K7619	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7621	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7624	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7625	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7708	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
K7711	ERJ6GMZ0R00	M. RESISTOR CH 1/10W 0	1	
L301	VLQ0509J151	COIL 150UH	1	
L302, 03	VLQ0509J100	COIL 10UH	2	
L304	VLQ0509J390	COIL 39UH	1	
L305	VLQ0509J470	COIL 47UH	1	
L306	VLQ0509J101	COIL 100UH	1	
L307	VLQ0509J270	COIL 27UH	1	
L308	VLQ0509J100	COIL 10UH	1	
L309	VLQ0509J470	COIL 47UH	1	
L311, 12	VLQ0509J680	COIL 68UH	2	
L313, 14	VLQ0509J390	COIL 39UH	2	
L315	VLQ0509J101	COIL 100UH	1	
L0701	VLQ0163JR33	COIL 0.33UH	1	
L0705	VLQ0163J2R7	COIL 2.7UH	1	
L0706	VLQEL05S8R2K	COIL 8.2UH	1	
L801	VLQ0509J101	COIL 100UH	1	
L2001	VLP0063	COIL	1	
L3001	VLQ0509J820	COIL 82UH	1	
L3002	VLQ0509J151	COIL 150UH	1	
L3003	VLQ0509J6R8	COIL 6.8UH	1	
L3004	VLQ0509J120	COIL 12UH	1	
L3006	VLQ0509J101	COIL 100UH	1	
L3008	VLQ0509J270	COIL 27UH	1	
L3009	VLQ0509J680	COIL 68UH	1	
L3012	VLQ0509J680	COIL 68UH	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L4002	ELESN471KA	INDUCTOR 470UH	1	
L4003	VLQ0509J680	COIL 68UH	1	
L4005, 06	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
L4007	VLQ0123	COIL	1	
L6001	VLQ0509J101	COIL 100UH	1	
L6002	VLP0083	COIL	1	
L6003, 04	VLQ0509J680	COIL 68UH	2	
L7301	ELEXN100JBY	INDUCTOR 10UH	1	
L7302	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
L7303, 04	VLQ0509J680	COIL 68UH	2	
L7606	VLQ0509J180	COIL 18UH	1	
L7607, 08	VLQ0509J330	COIL 33UH	2	
L7702	VLQ0509J3R3	COIL 3.3UH	1	
L7704	VLQ0509J100	COIL 10UH	1	
L7706	VLQ0509J390	COIL 39UH	1	
L7707	VLQ0509J120	COIL 12UH	1	
L7708	VLQ0509J150	COIL 15UH	1	
LB303-06	VLP0145	COIL	4	
LB307-11	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	5	
LB312	VLP0145	COIL	1	
LB1001	VLP0125	COIL	1	
LB3001	VLP0083	COIL	1	
P2001	VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002	VJS3537A015B	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3483	CONNECTOR (MALE) 3P	1	
P2005	VJS3537A009B	CONNECTOR (FEMALE) 9P	1	
P3002	VJS3537A020B	CONNECTOR (FEMALE) 20P	1	
P4002	VJS3675E006B	CONNECTOR (FEMALE) 6P	1	
P4003	VJP1230T	CONNECTOR (MALE) 3P	1	
P6001	VJS3821	CONNECTOR (FEMALE) 4P	1	
PK301	VJR0776B010W	CONNECTOR (MALE) 10P	1	[SUPPLIED FROM MBV]
PK302	VJR0776B011W	CONNECTOR (MALE) 11P	1	[SUPPLIED FROM MBV]
PK303	VJR0776B012W	CONNECTOR (MALE) 12P	1	[SUPPLIED FROM MBV]
PK304	VJR0776B003W	CONNECTOR (MALE) 3P	1	
PK0701	VJR0816E010W	CONNECTOR (MALE) 10P	1	
PK4501	VJR0777B008W	CONNECTOR (MALE) 8P	1	
PK4502, 03	VJR0777B010W	CONNECTOR (MALE) 10P	2	
PK7301	VJR0777B009W	CONNECTOR (MALE) 9P	1	
PK7302	VJR0777B008W	CONNECTOR (MALE) 8P	1	
PP0701	VJP3508A004B	CONNECTOR (MALE) 4P	1	
PP3002	VJP3042B013W	CONNECTOR (MALE) 13P	1	
PP3003	VJP3042B005W	CONNECTOR (MALE) 5P	1	
PP3004	VJP3042B008W	CONNECTOR (MALE) 8P	1	
PP3005	VJP3042B010W	CONNECTOR (MALE) 10P	1	
PS3001	VJS3673F005B	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
PS3006	VJS3631A011A	CONNECTOR (FEMALE) 11P	1	
PS8002	VJS3673B025B	CONNECTOR (FEMALE) 25P	1	
Q301, 02	MSD601	TRANSISTOR	2	
Q305	MSD601	TRANSISTOR	1	
Q306	MSB709	TRANSISTOR	1	
Q307	MSB709-R	TRANSISTOR	1	
Q308	MSB709	TRANSISTOR	1	
Q309	MSC2295	TRANSISTOR	1	
Q310	MSD601	TRANSISTOR	1	
Q0701	MSD601-S	TRANSISTOR	1	
Q0702	MSB709-R	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q803	MSC2295	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q805	MSD601	TRANSISTOR	1	
Q1001	MSD601	TRANSISTOR	1	
Q1002-04	2SD1996-S	TRANSISTOR	3	
Q1005	2SD602A-R	TRANSISTOR	1	
Q1007	2SD25440PQA	TRANSISTOR	1	
Q3001	MSC2295	TRANSISTOR	1	
Q3002	MSB709	TRANSISTOR	1	
Q3003, 04	MSD601	TRANSISTOR	2	
Q3005	MSC2295	TRANSISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q3007	MSC2295	TRANSISTOR	1	
Q3010	MSB709-R	TRANSISTOR	1	
Q3023	MSC2295	TRANSISTOR	1	
Q3024	MSD601	TRANSISTOR	1	
Q3025	MSC2295	TRANSISTOR	1	
Q4005	2SB1320A-R	TRANSISTOR	1	
Q4006	2SD602A-R	TRANSISTOR	1	
Q4007-09	MSD601-R	TRANSISTOR	3	
Q4501	2SD1468	TRANSISTOR	1	
Q4551	2SA1515	TRANSISTOR	1	
Q6001	MSB709	TRANSISTOR	1	
Q6002, 03	PN205LT-NCVT	PHOTO TRANSISTOR	2	
Q7301, 02	2SD1996	TRANSISTOR	2	
Q7304	2SC2404	TRANSISTOR	1	
Q7305	MSD601-S	TRANSISTOR	1	
Q7308	2SB709A	TRANSISTOR	1	
Q7310	2SB709A	TRANSISTOR	1	
Q7311-13	MSD1328-S	TRANSISTOR	3	
Q7601	XN4601	TRANSISTOR-TRANSISTOR	1	
Q7603	2SB710A	TRANSISTOR	1	
Q7702	MSB709	TRANSISTOR	1	
Q7705	MSD601	TRANSISTOR	1	
Q7706	MSB709	TRANSISTOR	1	
Q7707	MSD601	TRANSISTOR	1	
Q7708-12	MSD601	TRANSISTOR	4	
QR302	MUN2113	TRANSISTOR-RESISTOR	1	
QR304	MUN2113	TRANSISTOR-RESISTOR	1	
QR305	MUN2213	TRANSISTOR-RESISTOR	1	
QR311	MUN2113	TRANSISTOR-RESISTOR	1	
QR317	MUN2213	TRANSISTOR-RESISTOR	1	
QR319	UN2210	TRANSISTOR-RESISTOR	1	
QR901	MUN2213	TRANSISTOR-RESISTOR	1	
QR1001, 02	MUN2113	TRANSISTOR-RESISTOR	2	
QR1003	MUN2213	TRANSISTOR-RESISTOR	1	
QR3001	MUN2111	TRANSISTOR-RESISTOR	1	
QR3002, 03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR3027	MUN2212	TRANSISTOR-RESISTOR	1	
QR4001	MUN2212	TRANSISTOR-RESISTOR	1	
QR4551, 52	UN5213	TRANSISTOR-RESISTOR	2	
QR6001	XN1211	TRANSISTOR-RESISTOR	1	
QR6002	UN2114	TRANSISTOR-RESISTOR	1	
QR6004	XN1213	TRANSISTOR-RESISTOR	1	
QR6005	MUN2112	TRANSISTOR-RESISTOR	1	
QR7301	MUN2213	TRANSISTOR-RESISTOR	1	
QR7302	MUN2112	TRANSISTOR-RESISTOR	1	
QR7601	MUN2213	TRANSISTOR-RESISTOR	1	
QR7602	MUN2212	TRANSISTOR-RESISTOR	1	
QR7603	MUN2213	TRANSISTOR-RESISTOR	1	
R303	ERJ3GEYJ242	M. RESISTOR CH 1/16W 2.4K	1	
R304	ERJ3GEYJ225	M. RESISTOR CH 1/16W 2.2M	1	
R305	ERJ3GEYJ682	M. RESISTOR CH 1/16W 6.8K	1	
R307	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R308	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R309	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R310, 11	ERJ3GEYJ152	M. RESISTOR CH 1/16W 1.5K	2	
R312	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4.7K	1	
R313	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R314	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R315	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R316	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R317	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4.7K	1	
R319	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R320	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R321	ERJ3GEYJ120	M. RESISTOR CH 1/16W 12	1	
R322	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R323	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R324, 25	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R326	ERJ3GEYJ472	M. RESISTOR CH 1/16W 4.7K	1	
R327	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R328	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R329	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R330	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R332	ERJ3GEYJ390	M. RESISTOR CH 1/16W 39	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R333	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R335	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R337	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R338	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	1	
R339	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R341	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R344	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R346, 47	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R353	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R354	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R355	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R356, 57	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	2	
R358	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R360	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R369	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R373	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R374	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R375	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R376	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0702	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R0704	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R0705	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R0706, 07	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	2	
R0708	ERJ3GEYJ152	M. RESISTOR CH 1/16W 1.5K	1	
R0709	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R0710	ERJ6GEYJ154	M. RESISTOR CH 1/10W 150K	1	
R0713	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R0714	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0715	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R0716	VRE0040E151	M. RESISTOR CH 1/10W 150	1	
R0717	ERJ3GEYJ330	M. RESISTOR CH 1/16W 33	1	
R0718	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R0719	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R0720	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R0722	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R0728	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	1	
R0729	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
R0732	ERJ3GEYJ471	M. RESISTOR CH 1/16W 470	1	
R0783	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R801	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R802	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R803	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R810	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R811	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R812	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R813	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	[SUPPLIED FROM MBV]
R814	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R815	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R816	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R817	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	[SUPPLIED FROM MBV]
R818	ERJ3GEYJ242	M. RESISTOR CH 1/16W 2.4K	1	
R1001	ERJ6GEYJ333	M. RESISTOR CH 1/10W 33K	1	
R1002	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R1003	ERJ6GEYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R1004	ERJ6GEYJ363	M. RESISTOR CH 1/10W 36K	1	
R1005	ERJ6GEYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R1006	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R1007	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R1008	ERJ6GEYJ333	M. RESISTOR CH 1/10W 33K	1	
R1009, 10	ERJ6GEYJ562	M. RESISTOR CH 1/10W 5.6K	2	
R1011	ERDS1TJ272	C. RESISTOR 1/2W 2.7K	1	
R2001	ERJ6GEYJ913	M. RESISTOR CH 1/10W 91K	1	
R2002-04	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	3	
R2005	ERX1SJ1R8	M. RESISTOR 1W 1.8	1	
R2006	ERJ6GEYJ512	M. RESISTOR CH 1/10W 5.1K	1	
R2007	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R2009, 10	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	2	
R2011	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R2012	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R2013	ERJ6GEYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R2014, 15	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2016	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R2017, 18	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2019	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R2020	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R2021	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R2022	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R2023	EROS2CKF8200	M. RESISTOR 1/4W 820	1	
R2024	EROS2CKF6800	M. RESISTOR 1/4W 680	1	
R2025	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R2026, 27	ERDS2TJ560	C. RESISTOR 1/4W 56	2	
R2028	ERDS1TJ561	C. RESISTOR 1/2W 560	1	
R2029	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R2030	ERJ6GEYJ432	M. RESISTOR CH 1/10W 4.3K	1	
R2031	ERJ6GEYJ473	M. RESISTOR CH 1/10W 47K	1	
R2032	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R2034	ERJ6GEYJ133	M. RESISTOR CH 1/10W 13K	1	
R2035	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R2036, 37	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R2039, 40	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	2	
R2041, 42	ERJ6GEYJ392	M. RESISTOR CH 1/10W 3.9K	2	
R2043	ERDS2TJ560	C. RESISTOR 1/4W 56	1	
R2044	ERX12SJR47	M. RESISTOR 1/2W 0.47	1	
R2045	ERDS2FJ1R5	C. RESISTOR 1/4W 1.5	1	
R2046-48	ERDS2TJ330	C. RESISTOR 1/4W 33	3	
R2049	ERDS2FJ1R2	C. RESISTOR 1/4W 1.2	1	
R2050, 51	ERJ6GEYJ332	M. RESISTOR CH 1/10W 3.3K	2	
R2052	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R3001	ERJ6GEYJ561	M. RESISTOR CH 1/10W 560	1	
R3002	ERJ6GEYJ472	M. RESISTOR CH 1/10W 4.7K	1	
R3003	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R3004	ERJ6GEYJ272	M. RESISTOR CH 1/10W 2.7K	1	
R3005	ERJ6GEYJ332	M. RESISTOR CH 1/10W 3.3K	1	
R3006	ERDS2TJ472	C. RESISTOR 1/4W 4.7K	1	
R3007	ERJ6GEYJ681	M. RESISTOR CH 1/10W 680	1	
R3008	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R3009	ERJ6GEYJ392	M. RESISTOR CH 1/10W 3.9K	1	
R3012	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3015	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R3018	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3019, 20	ERJ6GEYJ561	M. RESISTOR CH 1/10W 560	2	
R3021	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R3022	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R3023, 24	ERJ6GEYJ821	M. RESISTOR CH 1/10W 820	2	
R3025	ERJ6GEYJ152	M. RESISTOR CH 1/10W 1.5K	1	
R3026	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R3029	ERJ6GEYJ222	M. RESISTOR CH 1/10W 2.2K	1	
R3030	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R3032	ERJ6GEYJ334	M. RESISTOR CH 1/10W 330K	1	
R3033	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3034	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R3037	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3039	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R3065	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R3068, 69	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	2	
R3076, 77	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	2	
R3078	ERDS2T0	C. RESISTOR 1/4W 0	1	
R3079, 80	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	2	
R3081	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R3082	ERJ6GEYJ152	M. RESISTOR CH 1/10W 1.5K	1	
R3083	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3084	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R3085	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
R3087	ERJ6GEYJ563	M. RESISTOR CH 1/10W 56K	1	
R4003	ERJ6GEYJ100	M. RESISTOR CH 1/10W 10	1	
R4007	ERJ6GEYJ153	M. RESISTOR CH 1/10W 15K	1	
R4011	ERJ6GEYJ103	M. RESISTOR CH 1/10W 10K	1	
R4012	ERJ6GEYJ123	M. RESISTOR CH 1/10W 12K	1	
R4013	ERJ6GEYJ183	M. RESISTOR CH 1/10W 18K	1	
R4014	ERJ6GEYJ562	M. RESISTOR CH 1/10W 5.6K	1	
R4015	ERJ6GEYJ333	M. RESISTOR CH 1/10W 33K	1	
R4016	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R4017	ERJ6GEYJ132	M. RESISTOR CH 1/10W 1.3K	1	
R4018	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R4020	ERJ6GEYJ123	M. RESISTOR CH 1/10W 12K	1	
R4021	ERJ6GEYJ393	M. RESISTOR CH 1/10W 39K	1	
R4022	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4023	ERJ6GEY0394	M. RESISTOR CH 1/10W 390K	1	
R4024	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R4025	ERJ6GEY0682	M. RESISTOR CH 1/10W 6.8K	1	
R4026	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R4027, 28	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R4029	ERJ6GEY0912	M. RESISTOR CH 1/10W 9.1K	1	
R4030	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R4031	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R4032	ERJ6GEY0271	M. RESISTOR CH 1/10W 270	1	
R4033	ERJ6GEY0681	M. RESISTOR CH 1/10W 680	1	
R4034	ERJ6GEY0183	M. RESISTOR CH 1/10W 18K	1	
R4035, 36	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R4037	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4038	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R4039	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R4040	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4041, 42	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	2	
R4043	ERG2SJ821	M. RESISTOR 2W 820	1	
R4044	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4046	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R4049	ERJ6GEY0682	M. RESISTOR CH 1/10W 6.8K	1	
R4050	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R4051	ERJ6GEY0822	M. RESISTOR CH 1/10W 8.2K	1	
R4054	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R4055	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R4056	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	1	
R4057	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R4058	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R4059	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R4067, 68	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	2	
R4071	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	1	
R4073	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4503	ERJ3RBD203	M. RESISTOR CH 1/16W 20K	1	
R4504	ERJ3GEY0224	M. RESISTOR CH 1/16W 220K	1	
R4508	ERJ3GEY0224	M. RESISTOR CH 1/16W 220K	1	
R4512	ERJ3RBD123	M. RESISTOR CH 1/16W 12K	1	
R4513	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4517, 18	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R4519, 20	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4522	ERJ3GEYK225	M. RESISTOR CH 1/16W 2.2M	1	
R4526	ERJ3RBD153	M. RESISTOR CH 1/16W 15K	1	
R4529	ERJ3GEY0562	M. RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4542	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R4562	ERJ3RBD912	M. RESISTOR CH 1/16W 9.1K	1	
R4563	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R4564	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4565	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R4566	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4598	ERJ6RED124	M. RESISTOR CH 1/10W 120K	1	
R4599	ERJ6RED114	M. RESISTOR CH 1/10W 110K	1	
R4601	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4603, 04	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R4605	ERJ6GEY0203	M. RESISTOR CH 1/10W 20K	1	
R4606	ERJ3GEYJ203	M. RESISTOR CH 1/16W 20K	1	
R4607	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4608	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R4621	ERJ6GEY0163	M. RESISTOR CH 1/10W 16K	1	
R4623	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R4624	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4641, 42	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4663, 64	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4666	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4667	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	1	
R4668	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R4704	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R6001	ERJ6GEYJ201	M. RESISTOR CH 1/10W 200	1	
R6002	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6003-05	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	3	
R6006, 07	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	2	
R6008	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6009	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6010	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6011	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R6012, 13	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	2	
R6014	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R6015	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R6016	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	1	
R6017	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R6018	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6019	ERDS2TJ473	C. RESISTOR 1/4W 47K	1	
R6020	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R6021-23	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	3	
R6024	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R6025	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6026	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R6027	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6028	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R6029, 30	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	2	
R6033	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6034	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6035, 36	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R6037, 38	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	2	
R6039	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
R6040, 41	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R6043	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R6044	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6046	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6048	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6049	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R6050	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6052	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6054	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R6055	ERJ6GEY0183	M. RESISTOR CH 1/10W 18K	1	
R6056-58	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R6059	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6060	ERJ6GEY0822	M. RESISTOR CH 1/10W 8.2K	1	
R6061	ERJ6GEY0243	M. RESISTOR CH 1/10W 24K	1	
R7301	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	
R7302	ERJ3GEY0472	M. RESISTOR CH 1/16W 4.7K	1	
R7303	ERJ3GEY0152	M. RESISTOR CH 1/16W 1.5K	1	
R7308	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	1	
R7309, 10	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	2	
R7311	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7312	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R7313, 14	ERJ3GEY0272	M. RESISTOR CH 1/16W 2.7K	2	
R7315	ERJ3GEYJ114	M. RESISTOR CH 1/16W 110K	1	
R7316	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R7317	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R7320	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R7321-23	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	3	
R7324	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7325	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7326	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R7327-29	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	3	
R7330	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7332	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7333	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R7334-36	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	3	
R7337	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7339	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7341-43	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	3	
R7344	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7345, 46	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R7350	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7351	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R7352-56	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	5	
R7357	ERJ3GEY0472	M. RESISTOR CH 1/16W 4.7K	1	
R7362	ERJ3GEY0682	M. RESISTOR CH 1/16W 6.8K	1	
R7366	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7367	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7368	ERJ3GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7370	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7376, 77	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	2	
R7378	ERJ3GEY0152	M. RESISTOR CH 1/16W 1.5K	1	
R7379	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7381	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7383	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7601	ERJ6GEY0151	M. RESISTOR CH 1/10W 150	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7602, 03	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R7604	ERJ6GEY0151	M. RESISTOR CH 1/10W 150	1	
R7605-07	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R7612	ERG2SJ331	M. RESISTOR 2W 330	1	
R7614	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7616	ERG2SJ331	M. RESISTOR 2W 330	1	
R7618	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7619	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7622, 23	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	2	
R7624	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7625	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R7626	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R7703, 04	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	2	
R7705	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7706	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
R7707	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7708	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7709	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7711	ERJ6GEY0122	M. RESISTOR CH 1/10W 1.2K	1	
R7712, 13	ERJ6GEZ0R00	M. RESISTOR CH 1/10W 0	2	
R7714-19	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	6	
R7723	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7725	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7732	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7733	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7735	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7736	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7737, 38	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7739	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7740	ERJ6GEY0911	M. RESISTOR CH 1/10W 910	1	
R7746	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	
R7747	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7750	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7751	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R7758	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7761	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
R7766-68	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	3	
R7769	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7770	ERJ6GEY0224	M. RESISTOR CH 1/10W 220K	1	
R7771	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7772	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R7773	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R7774	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7775	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R7776	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7777	ERJ6GEYK225	M. RESISTOR CH 1/10W 2.2M	1	
R7778	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R7779	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R7780	ERJ6GEY0271	M. RESISTOR CH 1/10W 270	1	
R7781	ERJ6GEY0224	M. RESISTOR CH 1/10W 220K	1	
R7782	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7785	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7786, 87	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7788	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7789	ERJ6GEY0154	M. RESISTOR CH 1/10W 150K	1	
R7790	ERJ6GEYJ301	M. RESISTOR CH 1/10W 300	1	
R7791	ERJ6GEY0122	M. RESISTOR CH 1/10W 1.2K	1	
R7792	ERJ6GEY0821	M. RESISTOR CH 1/10W 820	1	
R7793	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	
RX7701	EXBF8E103J	RESISTOR-RESISTOR	1	
S6001	VES0700	SWITCH	1	
T0703	EQV5EC071A	TRANSFORMER	1	
T0704	EQV5EC072A	TRANSFORMER	1	
T4002	EI070F0140	TRANSFORMER	1	
⚠ TU7601	ENV47250G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B24	V. RESISTOR 20K	1	
VR2001	EVNCYAA03B54	V. RESISTOR 50K	1	
VR3001, 02	EVNCYAA03B23	V. RESISTOR 2K	2	
VR3012, 13	EVNCYAA03B52	V. RESISTOR 500	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
VR3014	EVNCYAA03B54	V. RESISTOR 50K	1	
VR4001	EVNCYAA03B15	V. RESISTOR 100K	1	
VR4501	EVMECSA00B53	V. RESISTOR 6.8K	1	
VR4508	EVMECSA00B53	V. RESISTOR 5K	1	
VR4550	EVMECSA00B14	V. RESISTOR 10K	1	
X301	VSX0162	CRYSTAL OSCILLATOR	1	
X0701	VLF1389	FILTER	1	[SUPPLIED FROM MBV]
X0703	EFCT6M65MW3B	FILTER	1	[SUPPLIED FROM MBV]
X0704	VLF1388	FILTER	1	
X6001	VSX0583	CRYSTAL OSCILLATOR	1	
X7302	VSX0877	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
X7303	EFOEC4004A4	CERAMIC OSCILLATOR	1	
X7702	VSX0353	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMP4884	SUPPORT ANGLE	2	
	VMD2329	PHOTO TRANSISTOR HOLDER	2	
	VMD2328	REEL GUIDE	1	
	VMD2330	LED HOLDER	1	
	VSC3553	SHIELD COVER (MAIN)	1	FOR NICAM DECODER C.B.A.
	VSC3555	SHIELD COVER (BOTTOM)	1	FOR NICAM DECODER C.B.A.
	VMT0784	SPACER	1	FOR NICAM DECODER C.B.A.
	VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
■	VEP06807H	MAIN C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625EC
C301	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C302	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C305	ECUX1H102GCV	C. CAPACITOR CH 50V 1000P	1	[SUPPLIED FROM MBV]
C306	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C307	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C309	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C310	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C311	ECUM1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C312	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C313	ECUX1H681GCV	C. CAPACITOR CH 50V 680P	1	[SUPPLIED FROM MBV]
C314	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C315	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C316	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C317	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	1	
C318	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C319	ECUX1H222KBV	C. CAPACITOR CH 50V 2200P	1	
C320	ECUX1C333KBV	C. CAPACITOR CH 16V 0.033U	1	
C321	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C322	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C323	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C324	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C325	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C327	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C328	ECUX1H080DCV	C. CAPACITOR CH 50V 8P	1	
C329	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C330	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C331	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C332	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C333	ECUX1H060DCV	C. CAPACITOR CH 50V 6P	1	
C334	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C335	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C336	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C337	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C338	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C339	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C340	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C341	ECUX1E223KBV	C. CAPACITOR CH 25V 0.022U	1	
C342	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C343	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C344	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C345, 46	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C347	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C348	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C349	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C350	ECUX1H152KBV	C. CAPACITOR CH 50V 1500P	1	
C351	ECUX1H392KBV	C. CAPACITOR CH 50V 3900P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C352	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C353	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C354	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C355	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C356	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C357	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C358	ECUX1H472KBV	C. CAPACITOR CH 50V 4700P	1	
C361	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C362	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C363	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1	
C365, 66	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	2	
C370	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C371	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C372, 73	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	2	
C374	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C375	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C376	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C378	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C379, 80	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	2	
C381	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C0701, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0704	ECUX1H331JCV	C. CAPACITOR CH 50V 330P	1	
C0706	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0707, 08	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C0709	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0710	ECUX1H470JPV	C. CAPACITOR CH 50V 47P	1	
C0711	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C0712	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0714	ECQB1H473JF	P. CAPACITOR 50V 0.047U	1	
C0715	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C0716	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C0717	ECUX1H270JPV	C. CAPACITOR CH 50V 27P	1	
C0718	ECEA1HKSR47	E. CAPACITOR 50V 0.47U	1	
C0719	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C0720	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0723	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C0726	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0730	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C0732	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C801	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C802	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C803	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C804	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C805	ECUX1H050CCV	C. CAPACITOR CH 50V 5P	1	
C806	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C807	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C1001	ECEA1CGE101	E. CAPACITOR 16V 100U	1	
C1002	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1003	ECEA1CGE470	E. CAPACITOR 16V 47U	1	
C1004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1005	ECEA0JKS220	E. CAPACITOR 6.3V 22U	1	
C1006	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1007	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1008	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1009	ECEA1AKS220	E. CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
C1010	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1011	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C1012	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C1013	ECEA0JKS220	E. CAPACITOR 6.3V 22U	1	
C2001	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2002, 03	ECUV1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2004	ECUV1H223KBN	C. CAPACITOR CH 50V 0.022U	1	
C2005	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2006	ECUV1H392KBN	C. CAPACITOR CH 50V 3900P	1	
C2007	ECUV1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C2008	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2009	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2010	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	1	
C2011	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C2012	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C2013	ECUV1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2014	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2015	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2016, 17	ECEA1EKS3R3	E. CAPACITOR 25V 3.3U	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2019, 20	ECUV1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C2021, 22	ECUV1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C2023	ECUV1H222KBN	C. CAPACITOR CH 50V 2200P	1	
C2024, 25	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	2	
C2026	ECEA1HKSR22	E. CAPACITOR 50V 0.22U	1	
C2027	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2028	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C2029	ECA1EM470	E. CAPACITOR 25V 47U	1	
C2030, 31	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	2	
C2032	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2033	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C2035	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C2036	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2037	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C2038-40	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	3	
C2041, 42	ECUV1H680JCN	C. CAPACITOR CH 50V 68P	2	
C2043, 44	ECUV1C474ZFN	C. CAPACITOR CH 16V 0.47U	2	
C2045	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C2046	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C2047-49	ECEA1VKS4R7	E. CAPACITOR 35V 4.7U	3	
C2050	ECUV1H473ZFN	C. CAPACITOR CH 50V 0.047U	1	
C2051	ECEA0JKS101	E. CAPACITOR 6.3V 100U	1	
C2052	ECQV1H683JM	P. CAPACITOR 50V 0.068U	1	
C2053	ECEA1HKSR47	E. CAPACITOR 50V 0.47U	1	
C2054	ECUV1H101JCN	C. CAPACITOR CH 50V 100P	1	
C2055	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C2056	ECQV1H104JM	P. CAPACITOR 50V 0.1U	1	
C2057, 58	ECEA1HKS0R1	E. CAPACITOR 50V 0.1U	2	
C2059	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	1	
C2061	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3001	ECUV1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3002	ECUV1H181JCN	C. CAPACITOR CH 50V 180P	1	
C3003	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3006	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3007	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C3008	ECUV1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C3009	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3010	ECUV1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C3017, 18	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C3019	ECUV1H620JCN	C. CAPACITOR CH 50V 62P	1	
C3021	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3023	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3024	ECUV1E333KBN	C. CAPACITOR CH 25V 0.033U	1	
C3027	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3028	ECUV1H151JCN	C. CAPACITOR CH 50V 150P	1	
C3029	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3031	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C3032	ECUV1H681JCN	C. CAPACITOR CH 50V 680P	1	
C3033	ECUV1H330JCN	C. CAPACITOR CH 50V 33P	1	
C3055	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C3057	ECUV1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3061	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3062	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C3064	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C3065	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3066	ECUV1H151JCN	C. CAPACITOR CH 50V 150P	1	
C4004	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4005	ECCD2H181J	C. CAPACITOR 500V 180P	1	
C4006	ECEA1CKA330	E. CAPACITOR 16V 33U	1	
C4007	ECUV1H153KBN	C. CAPACITOR CH 50V 0.015U	1	
C4009	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4010	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4011	ECQP1362JZ	P. CAPACITOR 100V 3600P	1	[SUPPLIED FROM MBV]
C4017	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4018-20	ECEA1HKA0R1	E. CAPACITOR 50V 0.1U	3	
C4021, 22	ECUV1H153KBN	C. CAPACITOR CH 50V 0.015U	2	
C4023	ECUV1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C4024	ECUV1H272KBN	C. CAPACITOR CH 50V 2700P	1	
C4025, 26	ECEA1CKA220	E. CAPACITOR 16V 22U	2	
C4027	ECEA1HKS3R3	E. CAPACITOR 50V 3.3U	1	
C4028	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4029, 30	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	2	
C4031	ECEA1AKA101	E. CAPACITOR 10V 100U	1	
[illegible]	[illegible]	[illegible]	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4033, 34	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	2	
C4038	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4039	ECUV1H220JCN	C. CAPACITOR CH 50V 22P	1	
C4040	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4042	ECUV1H222JCN	C. CAPACITOR CH 50V 2200P	1	
C4044	ECEA1HKA4R7	E. CAPACITOR 50V 4.7U	1	
C4501	ECUX1H681JCV	C. CAPACITOR CH 50V 680P	1	
C4502	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4503	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4506	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4507	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4508	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	
C4509	ECA1CAK470X	E. CAPACITOR 16V 47U	1	
C4510	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4511	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4512	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4513	ECUV1H681JCN	C. CAPACITOR CH 50V 680P	1	
C4514	ECUV1H561JCN	C. CAPACITOR CH 50V 560P	1	
C4515	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4521	ECUV1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4522	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4530	ECA0JAK470X	E. CAPACITOR 6.3V 47U	1	[SUPPLIED FROM MBV]
C4533	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4537	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C4538	ECA1HAKR47X	E. CAPACITOR 50V 0.47U	1	[SUPPLIED FROM MBV]
C4541	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4551	ECQB1H223JF	P. CAPACITOR 50V 0.022U	1	
C4556	ECA1CAK100X	E. CAPACITOR 16V 10U	1	[SUPPLIED FROM MBV]
C4558	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4559	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C4560	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C4561	ECQB1H332JF	P. CAPACITOR 50V 3300P	1	
C4562	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1	
C4565	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4569	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C4572	ECA1HAK4R7X	E. CAPACITOR 50V 4.7U	1	[SUPPLIED FROM MBV]
C4576	ECUV1H473KBN	C. CAPACITOR CH 50V 0.047U	1	
C4585, 86	ECA0JAK101X	E. CAPACITOR 6.3V 100U	2	[SUPPLIED FROM MBV]
C4587	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C4591	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4592	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	1	
C4673	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C4674	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4676	ECA1VAK470X	E. CAPACITOR 35V 47U	1	[SUPPLIED FROM MBV]
C4677	ECA1CAK470X	E. CAPACITOR 16V 47U	1	[SUPPLIED FROM MBV]
C6001	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6002	ECUV1C224ZFN	C. CAPACITOR CH 16V 0.22U	1	
C6003	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C6004	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C6005	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C6006	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6007	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C6008	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C6009	ECUV1H150JCN	C. CAPACITOR CH 50V 15P	1	
C6010	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6013, 14	ECUV1H271JCN	C. CAPACITOR CH 50V 270P	2	
C6015	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C6016	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6018	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7301, 02	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C7303	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7304	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7305	ECEA1CKA220	E. CAPACITOR 16V 22U	1	
C7306	ECUX1H391JCV	C. CAPACITOR CH 50V 390P	1	
C7309-12	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	4	
C7313	ECEA0JKA220	E. CAPACITOR 6.3V 22U	1	
C7314	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7315	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C7317, 18	ECUX1H040CCV	C. CAPACITOR CH 50V 4P	2	
C7320	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7321	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	1	
C7322	ECEA1EKA4R7	E. CAPACITOR 25V 4.7U	1	
C7323, 24	ECUX1H391JCV	C. CAPACITOR CH 50V 390P	2	
C7325, 26	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C7327	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7328	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C7329, 30	ECUX1H471JCV	C. CAPACITOR CH 50V 470P	2	
C7331	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7332, 33	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	2	
C7334	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7335	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7338	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7339	ECUV1H182KBN	C. CAPACITOR CH 50V 1800P	1	
C7340	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7341	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7342	ECUV1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7343	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7344	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7345	ECUV1H182KBN	C. CAPACITOR CH 50V 1800P	1	
C7346	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7347	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7348	ECUV1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7350	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7351	ECUV1H471JCN	C. CAPACITOR CH 50V 470P	1	
C7352	ECUV1H182KBN	C. CAPACITOR CH 50V 1800P	1	
C7353	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7354	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7355	ECUV1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7357	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7358	ECEA1HKA3R3	E. CAPACITOR 50V 3.3U	1	
C7359	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7365, 66	ECEA1HKA010	E. CAPACITOR 50V 1U	2	
C7369	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7370	ECUX1C104ZFV	C. CAPACITOR CH 16V 0.1U	1	
C7371, 72	ECUX1H103ZFV	C. CAPACITOR CH 50V 0.01U	2	
C7374, 75	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	2	
C7601	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7604	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7605	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7606	ECEA1CKA101	E. CAPACITOR 16V 100U	1	
C7608	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C7609	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7610	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7612	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7614	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7615	ECEA1HKA010	E. CAPACITOR 50V 1U	1	
C7616	ECUV1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C7617	ECEA1AKS221	E. CAPACITOR 10V 220U	1	
C7701	ECUV1H150JCN	C. CAPACITOR CH 50V 15P	1	
C7702	ECUV1H080DCN	C. CAPACITOR CH 50V 8P	1	
C7704, 05	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7706	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7707-10	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	4	
C7712	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7713	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7714	ECEA0JKA101	E. CAPACITOR 6.3V 100U	1	
C7715	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C7716	ECUV1H120JCN	C. CAPACITOR CH 50V 12P	1	
C7718	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7721	ECUV1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7722	ECUV1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7723	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7724	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7726	VLQ0500J121	COIL 120UH	1	
C7729	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7731	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7732	ECUV1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C7734	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7736	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7737	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
C7738, 39	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7743	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7747	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7750	ECUX1H561JCN	C. CAPACITOR CH 50V 560P	1	
C7751	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7752	ECEA1HKA2R2	E. CAPACITOR 50V 2.2U	1	
C7753, 54	ECUV1H221JCN	C. CAPACITOR CH 50V 220P	2	
C7755-57	ECUV1H104ZFN	C. CAPACITOR CH 50V 0.1U	3	
C7758	ECUV1H470JCN	C. CAPACITOR CH 50V 47P	1	
C7759, 60	ECUV1H101JCN	C. CAPACITOR CH 50V 100P	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D302, 03	1SS355	DIODE	2	
D305	1SS355	DIODE	1	
D313, 14	1SS355	DIODE	2	
D318	1SS355	DIODE	1	
D319	MA151K	DIODE	1	
D320	MA151WK	DIODE	1	
D321	1SS355	DIODE	1	
D802-04	1SS355	DIODE	3	
D1001	MA4051-L	DIODE	1	
D1003	MA4120-M	DIODE	1	
D1004	MA4051-L	DIODE	1	
D1006	1SS355	DIODE	1	
D1007, 08	1SS355	DIODE	2	
D1009	1SS254	DIODE	1	
D2001	MA153	DIODE	1	
D2002	MA151K	DIODE	1	
D2003-05	1SS355	DIODE	3	
D2006, 07	MA700	DIODE	2	
D2008, 09	MA185	DIODE	2	
D2010-13	1SS355	DIODE	4	
D3001, 02	1SS254	DIODE	2	
D3006	MA723-VT	DIODE	1	
D4003-05	1SS254	DIODE	3	
D4007	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
D4504	1SS254	DIODE	1	
D6001	LN60LT.VT	LED	1	
D6002	MA4075-L	DIODE	1	
D6003	MA151K	DIODE	1	
D7301	MA3082-L	DIODE	1	
D7302	MA151K	DIODE	1	
D7303	MA151WK	DIODE	1	
D7304	MA717	DIODE	1	
D7306	MA151WK	DIODE	1	
D7308	MA723-VT	DIODE	1	
D7601	MA4300-M	DIODE	1	
D7704	MA700A	DIODE	1	
D7705	1SS254	DIODE	1	
D7707	1SS254	DIODE	1	
FL7301, 02	VLF0633	FILTER	2	
IC301	TDA8725V2	IC	1	[SUPPLIED FROM MBV]
IC302	TL8850AF	IC	1	
IC0701	LA7576	IC	1	
IC1001	HA17431PA	IC	1	
IC2001	BA6887-V3	IC	1	
IC2002	BA6871BS	IC	1	
IC2003	AN3814K	IC	1	
IC4001	BA7796FS	IC	1	
IC4501	BH7778AK	IC	1	
IC6001	MN675530VRBY	IC	1	[SUPPLIED FROM MBV]
IC6002, 03	ON1367	PHOTO INTERRUPTER	2	
IC7301	MSP3410B-F7	IC	1	[SUPPLIED FROM MBV]
IC7302	PST7043	IC	1	
IC7303	M5230FP	IC	1	
IC7304	HA17431PA	IC	1	
IC7305	MN155402VZDB	IC	1	
IC7306	PST7043	IC	1	
IC7701	M27C1001BAAA	IC	1	[SUPPLIED FROM MBV]
IC7702	MC74HCT573AN	IC	1	[SUPPLIED FROM MBV]
IC7703	NJM2535M	IC	1	[SUPPLIED FROM MBV]
IC7704	ST24W16FB6	IC	1	[SUPPLIED FROM MBV]
IC7705	BH7236AF	IC	1	
IC7706	SABC513AL16P	IC	1	[SUPPLIED FROM MBV]
IC7708	SAA5281ZP03	IC	1	
IC7712	MC74HCT74AD	IC	1	[SUPPLIED FROM MBV]
⚠ IP1001	VSF0015A10	IC PROTECTOR	1	
K308	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K310	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0702	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K0704, 05	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
K1001	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
K3001	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K3005	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K3014, 15	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	2	
K4002	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K4004	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K4502-06	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	5	
K6002	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K6006, 07	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	2	
K7304-07	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	4	
K7314	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K7317	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
K7619	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K7621	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K7624	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K7625	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
K7709	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
K7711	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	1	
L301	VLQ0580J151	COIL 150UH	1	
L302, 03	VLQ0580J100	COIL 10UH	2	
L304	VLQ0580J390	COIL 39UH	1	
L305	VLQ0580J470	COIL 47UH	1	
L306	VLQ0580J101	COIL 100UH	1	
L307	VLQ0580J270	COIL 27UH	1	
L308	VLQ0580J100	COIL 10UH	1	
L309	VLQ0580J470	COIL 47UH	1	
L311, 12	VLQ0580J680	COIL 68UH	2	
L313, 14	VLQ0580J390	COIL 39UH	2	
L315	VLQ0580J101	COIL 100UH	1	
L0701	VLQ0163JR18	COIL 0.18UH	1	[SUPPLIED FROM MBV]
L0705	VLQ0163J5R6	COIL 5.6UH	1	
L0706	VLQEL065T150K	COIL 15UH	1	
L801	VLQ0580J101	COIL 100UH	1	
L2001	VLP0083	COIL	1	
L3001	VLQ0580J820	COIL 82UH	1	
L3002	VLQ0580J151	COIL 150UH	1	
L3003	VLQ0580J6R8	COIL 6.8UH	1	
L3004	VLQ0580J120	COIL 12UH	1	
L3006	VLQ0580J101	COIL 100UH	1	
L3008	VLQ0580J270	COIL 27UH	1	
L3009	VLQ0580J680	COIL 68UH	1	
L3012	VLQ0580J680	COIL 68UH	1	
L4002	ELESN471KA	INDUCTOR 470UH	1	
L4003	VLQ0580J680	COIL 68UH	1	
L4005, 06	ERJ6ENZ0R00	M. RESISTOR CH 1/10W 0	2	
L4007	VLQ0123	COIL	1	
L6001	VLQ0580J101	COIL 100UH	1	
L6002	VLP0083	COIL	1	
L6003, 04	VLQ0580J680	COIL 68UH	2	
L7301	ELEXM100JBV	INDUCTOR 10UH	1	
L7302	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
L7603, 04	VLQ0580J680	COIL 68UH	2	
L7606	VLQ0580J180	COIL 18UH	1	
L7607, 08	VLQ0580J330	COIL 33UH	2	
L7702	VLQ0580J3R3	COIL 3.3UH	1	
L7703	VLQ0580J270	COIL 27UH	1	
L7704	VLQ0580J100	COIL 10UH	1	
L7705	VLQ0580J390	COIL 39UH	1	
L7707	VLQ0580J120	COIL 12UH	1	
L7708	VLQ0580J150	COIL 15UH	1	
LB303-06	VLP0145	COIL	4	
LB307-11	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	5	
LB312	VLP0145	COIL	1	
LB1001	VLP0125	COIL	1	
LB3001	VLP0083	COIL	1	
P2001	VJS3640A002	CONNECTOR (FEMALE) 2P	1	
P2002	VJS3537A0150	CONNECTOR (FEMALE) 15P	1	
P2003	VJP3483	CONNECTOR (MALE) 3P	1	
P2005	VJS3637A0090	CONNECTOR (FEMALE) 9P	1	
P3002	VJS3537A0200	CONNECTOR (FEMALE) 20P	1	
P4002	VJS3675E0060	CONNECTOR (FEMALE) 6P	1	
P4003	VJP1230T	CONNECTOR (MALE) 3P	1	
P6001	VJS3821	CONNECTOR (FEMALE) 4P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
PK301	VJR0776B010W	CONNECTOR (MALE) 10P	1	[SUPPLIED FROM MBV]
PK302	VJR0776B011W	CONNECTOR (MALE) 11P	1	[SUPPLIED FROM MBV]
PK303	VJR0776B012W	CONNECTOR (MALE) 12P	1	[SUPPLIED FROM MBV]
PK304	VJR0776B003W	CONNECTOR (MALE) 3P	1	
PK0701	VJR0816E010W	CONNECTOR (MALE) 10P	1	
PK4501	VJR0777B008W	CONNECTOR (MALE) 8P	1	
PK4502, 03	VJR0777B010W	CONNECTOR (MALE) 10P	2	
PK7301	VJR0777B009W	CONNECTOR (MALE) 9P	1	
PK7302	VJR0777B008W	CONNECTOR (MALE) 8P	1	
PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
PP3002	VJP3042B013W	CONNECTOR (MALE) 13P	1	
PP3003	VJP3042B005W	CONNECTOR (MALE) 5P	1	
PP3004	VJP3042B008W	CONNECTOR (MALE) 8P	1	
PP3005	VJP3042B010W	CONNECTOR (MALE) 10P	1	
PS3001	VJS3673F005B	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
PS3006	VJS3631A011A	CONNECTOR (FEMALE) 11P	1	
PS6002	VJS3673B025N	CONNECTOR (FEMALE) 25P	1	
Q301, 02	MSD601	TRANSISTOR	2	
Q305	MSD601	TRANSISTOR	1	
Q306	MSB709	TRANSISTOR	1	
Q307	MSB709-R	TRANSISTOR	1	
Q308	MSB709	TRANSISTOR	1	
Q309	MSC2295	TRANSISTOR	1	
Q310	MSD601	TRANSISTOR	1	
Q0701	MSD601-S	TRANSISTOR	1	
Q0702	MSB709-R	TRANSISTOR	1	
Q801	MSB709	TRANSISTOR	1	
Q803	MSC2295	TRANSISTOR	1	
Q804	MSB709	TRANSISTOR	1	
Q805	MSD601	TRANSISTOR	1	
Q1001	MSD601	TRANSISTOR	1	
Q1002-04	2SD1996-S	TRANSISTOR	3	
Q1006	2SD602A-R	TRANSISTOR	1	
Q1007	2SD2544QPQA	TRANSISTOR	1	
Q3001	MSC2295	TRANSISTOR	1	
Q3002	MSB709	TRANSISTOR	1	
Q3003, 04	MSD601	TRANSISTOR	2	
Q3005	MSC2295	TRANSISTOR	1	
Q3006	MSB709	TRANSISTOR	1	
Q3007	MSC2295	TRANSISTOR	1	
Q3010	MSB709-R	TRANSISTOR	1	
Q3023	MSC2295	TRANSISTOR	1	
Q3024	MSD601	TRANSISTOR	1	
Q3025	MSC2295	TRANSISTOR	1	
Q4005	2SB1320A-R	TRANSISTOR	1	
Q4006	2SD602A-R	TRANSISTOR	1	
Q4007-09	MSD601-R	TRANSISTOR	3	
Q4501	2SD1468	TRANSISTOR	1	
Q4551	2SA1515	TRANSISTOR	1	
Q6001	MSB709	TRANSISTOR	1	
Q6002, 03	PN205LT-MCVT	PHOTO TRANSISTOR	2	
Q7301, 02	2SD1996	TRANSISTOR	2	
Q7304	2SC2404	TRANSISTOR	1	
Q7305	MSD601-S	TRANSISTOR	1	
Q7308-10	2SB709A	TRANSISTOR	3	
Q7311-13	MSD1328-S	TRANSISTOR	3	
Q7601	XN4601	TRANSISTOR-TRANSISTOR	1	
Q7603	2SB710A	TRANSISTOR	1	
Q7702	MSB709	TRANSISTOR	1	
Q7704, 05	MSD601	TRANSISTOR	2	
Q7706	MSB709	TRANSISTOR	1	
Q7707-12	MSD601	TRANSISTOR	6	
QR302	UN2113	TRANSISTOR-RESISTOR	1	
QR304	UN2113	TRANSISTOR-RESISTOR	1	
QR306	UN2213	TRANSISTOR-RESISTOR	1	
QR311	UN2113	TRANSISTOR-RESISTOR	1	
QR317	UN2213	TRANSISTOR-RESISTOR	1	
QR319	UN2210	TRANSISTOR-RESISTOR	1	
QR801	UN2213	TRANSISTOR-RESISTOR	1	
QR1001, 02	UN2113	TRANSISTOR-RESISTOR	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
QR1003	UN2213	TRANSISTOR-RESISTOR	1	
QR3001	UN2111	TRANSISTOR-RESISTOR	1	
QR3002, 03	DTC363EK	TRANSISTOR-RESISTOR	2	
QR3027	UN2212	TRANSISTOR-RESISTOR	1	
QR4001	UN2212	TRANSISTOR-RESISTOR	1	
QR4651, 52	UN5213	TRANSISTOR-RESISTOR	2	
QR6001	XN1211	TRANSISTOR-RESISTOR	1	
QR6002	UN2114	TRANSISTOR-RESISTOR	1	
QR6004	XN1213	TRANSISTOR-RESISTOR	1	
QR6005	UN2112	TRANSISTOR-RESISTOR	1	
QR7301	UN2213	TRANSISTOR-RESISTOR	1	
QR7302	UN2112	TRANSISTOR-RESISTOR	1	
QR7601	UN2213	TRANSISTOR-RESISTOR	1	
QR7602	UN2212	TRANSISTOR-RESISTOR	1	
QR7603	UN2213	TRANSISTOR-RESISTOR	1	
QR7703	UN2113	TRANSISTOR-RESISTOR	1	
R303	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R304	ERJ3GEYJ225	M. RESISTOR CH 1/16W 2.2M	1	
R305	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R307	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R308	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R309	ERJ3GEYJ271	M. RESISTOR CH 1/16W 270	1	
R310, 11	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	2	
R312	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R313	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R314	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R315	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R316	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R317	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R319	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R320	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R321	ERJ3GEYJ120	M. RESISTOR CH 1/16W 12	1	
R322	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R323	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R324, 25	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R326	ERJ3GEYJ242	M. RESISTOR CH 1/16W 2.4K	1	
R327	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R328	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R329	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R330	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R332	ERJ3GEYJ390	M. RESISTOR CH 1/16W 39	1	
R333	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R335	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R337	ERJ3GEYJ561	M. RESISTOR CH 1/16W 560	1	
R338	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R339	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R340	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R341	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R344	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R346, 47	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R353	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R354	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R355	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R356, 57	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	2	
R358	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R360	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R368	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R373	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R374	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R375	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R376	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0704	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R0705	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R0706, 07	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	2	
R0708	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R0709	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R0710	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1	
R0713	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R0714	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R0715	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	1	
R0716	VRE0040E151	M. RESISTOR CH 1/10W 150	1	
R0717	ERJ3GEYJ330	M. RESISTOR CH 1/16W 33	1	
R0718	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R0719	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R0720	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R0722	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R0728	ERJ3GEY0471	M. RESISTOR CH 1/16W 470	1	
R0729	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R0732	ERJ3GEY0471	M. RESISTOR CH 1/16W 470	1	
R0783	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R801	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R802	ERJ3GEY0681	M. RESISTOR CH 1/16W 680	1	
R803	ERJ3GEY0182	M. RESISTOR CH 1/16W 1.8K	1	
R810	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R811	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R812	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R813	ERJ3GEY0561	M. RESISTOR CH 1/16W 560	1	[SUPPLIED FROM MBY]
R814	ERJ3GEY0103	M. RESISTOR CH 1/16W 10K	1	
R815	ERJ3GEY0681	M. RESISTOR CH 1/16W 680	1	
R816	ERJ3GEY0181	M. RESISTOR CH 1/16W 180	1	
R817	ERJ3GEY0101	M. RESISTOR CH 1/16W 100	1	[SUPPLIED FROM MBY]
R818	ERJ3GEY0242	M. RESISTOR CH 1/16W 2.4K	1	
R1001	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	1	
R1002	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R1003	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R1004	ERJ6GEYJ363	M. RESISTOR CH 1/10W 36K	1	
R1005	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R1006	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R1007	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R1008	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	1	
R1009, 10	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	2	
R1011	ERDS1TJ272	C. RESISTOR 1/2W 2.7K	1	
R2001	ERJ6GEY0913	M. RESISTOR CH 1/10W 91K	1	
R2002-04	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R2005	ERX1SJ1R8	M. RESISTOR 1W 1.8	1	
R2006	ERJ6GEY0512	M. RESISTOR CH 1/10W 5.1K	1	
R2007	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2009, 10	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R2011	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R2012	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R2013	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R2014, 15	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2016	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2017, 18	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R2019	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R2020	ERJ6GEY0471	M. RESISTOR CH 1/10W 470	1	
R2021	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R2022	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2023	ERDS2CKB8200	M. RESISTOR 1/4W 820	1	
R2024	ERDS2CKB6800	M. RESISTOR 1/4W 680	1	
R2025	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R2026, 27	ERDS2TJ560	C. RESISTOR 1/4W 56	2	
R2028	ERDS1TJ561	C. RESISTOR 1/2W 560	1	
R2029	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R2030	ERJ6GEY0432	M. RESISTOR CH 1/10W 4.3K	1	
R2031	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R2032	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R2033	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R2034	ERJ6GEY0133	M. RESISTOR CH 1/10W 13K	1	
R2035	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R2036, 37	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	2	
R2038	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R2039, 40	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	2	
R2041, 42	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	2	
R2043	ERDS2TJ560	C. RESISTOR 1/4W 56	1	
R2044	ERX12SJR47	M. RESISTOR 1/2W 0.47	1	
R2045	ERDS2FJ1R5	C. RESISTOR 1/4W 1.5	1	
R2046-48	ERDS2TJ330	C. RESISTOR 1/4W 33	3	
R2049	ERDS2FJ1R2	C. RESISTOR 1/4W 1.2	1	
R2050, 51	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	2	
R2052	ERDS2TJ122	C. RESISTOR 1/4W 1.2K	1	
R3001	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	1	
R3002	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R3003	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3004	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R3005	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R3007	ERDS2TJ472	C. RESISTOR 1/4W 4.7K	1	
R3008	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3009	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R3012	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3015	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3018	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3019, 20	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	2	
R3021	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R3022	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3023, 24	ERJ6GEY0821	M. RESISTOR CH 1/10W 820	2	
R3025	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R3026	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3029	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R3030	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3031	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3032	ERJ6GEY0334	M. RESISTOR CH 1/10W 330K	1	
R3033	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R3034	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3037	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3038	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3065	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3068, 69	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R3076, 77	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R3078	ERDS2T0	C. RESISTOR 1/4W 0	1	
R3079, 80	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	2	
R3081	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R3082	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R3083	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R3084	ERDS2TJ330	C. RESISTOR 1/4W 33	1	
R3085	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R3087	ERJ6GEY0563	M. RESISTOR CH 1/10W 56K	1	
R4003	ERJ6GEY0100	M. RESISTOR CH 1/10W 10	1	
R4007	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R4011	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4012	ERJ6GEY0123	M. RESISTOR CH 1/10W 12K	1	
R4013	ERJ6GEYJ163	M. RESISTOR CH 1/10W 16K	1	
R4014	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	1	
R4015	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	1	
R4016	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R4017	ERJ6GEY0133	M. RESISTOR CH 1/10W 1.3K	1	
R4019	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R4020	ERJ6GEY0123	M. RESISTOR CH 1/10W 12K	1	
R4021	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	1	
R4022	ERJ6GEY0391	M. RESISTOR CH 1/10W 390	1	
R4023	ERJ6GEY0394	M. RESISTOR CH 1/10W 390K	1	
R4024	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R4025	ERJ6GEY0682	M. RESISTOR CH 1/10W 6.8K	1	
R4026	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R4027, 28	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R4029	ERJ6GEY0912	M. RESISTOR CH 1/10W 9.1K	1	
R4030	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4031	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R4032	ERJ6GEY0271	M. RESISTOR CH 1/10W 270	1	
R4033	ERJ6GEY0681	M. RESISTOR CH 1/10W 680	1	
R4034	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4035, 36	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	2	
R4037	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R4038	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R4039	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R4040	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4041, 42	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	2	
R4043	ERG2SJ821	M. RESISTOR 2W 820	1	
R4044	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R4048	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R4049	ERJ6GEY0682	M. RESISTOR CH 1/10W 6.8K	1	
R4050	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	1	
R4051	ERJ6GEY0822	M. RESISTOR CH 1/10W 8.2K	1	
R4054	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4055	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R4056	ERJ6GEY0393	M. RESISTOR CH 1/10W 39K	1	
R4057	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R4058	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R4059	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R4067, 68	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R4071	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4503	ERJ3RBD203	M. RESISTOR CH 1/16W 20K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4504	ERJ3GEY0224	M. RESISTOR CH 1/16W 220K	1	
R4506	ERJ3GEY0224	M. RESISTOR CH 1/16W 220K	1	
R4512	ERJ3RBD123	M. RESISTOR CH 1/16W 12K	1	
R4513	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4517, 18	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R4519, 20	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4522	ERJ3GEYK225	M. RESISTOR CH 1/16W 2.2M	1	
R4528	ERJ3RBD153	M. RESISTOR CH 1/16W 15K	1	
R4529	ERJ3GEY0562	M. RESISTOR CH 1/16W 5.6K	1	
R4530	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
R4534	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4542	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R4562	ERJ3RBD912	M. RESISTOR CH 1/16W 9.1K	1	
R4563	ERJ3GEYJ272	M. RESISTOR CH 1/16W 2.7K	1	
R4584	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4585	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R4586	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4598	ERJ6RED124	M. RESISTOR CH 1/10W 120K	1	
R4599	ERJ6RED114	M. RESISTOR CH 1/10W 110K	1	
R4601	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4603, 04	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R4605	ERJ6GEY0203	M. RESISTOR CH 1/10W 20K	1	
R4606	ERJ3GEYJ203	M. RESISTOR CH 1/16W 20K	1	
R4607	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4608	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R4621	ERJ6GEY0163	M. RESISTOR CH 1/10W 16K	1	
R4623	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R4624	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R4641, 42	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	2	
R4663, 64	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R4665	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R4697	ERJ6GEY0562	M. RESISTOR CH 1/10W 5.6K	1	
R4698	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R4704	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R6001	ERJ6GEYJ201	M. RESISTOR CH 1/10W 200	1	
R6002	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6003-05	ERJ6GEY0333	M. RESISTOR CH 1/10W 33K	3	
R6006, 07	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	2	
R6008	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6009	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6010	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6011	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6012, 13	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	2	
R6014	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R6015	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R6016	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	1	
R6017	ERDS2TJ103	C. RESISTOR 1/4W 10K	1	
R6018	ERDS2TJ473	C. RESISTOR 1/4W 47K	1	
R6020	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R6021-23	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	3	
R6024	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R6025	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6026	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R6027	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6028	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R6029, 30	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	2	
R6033	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R6034	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6035, 36	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R6037, 38	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	2	
R6039	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
R6040, 41	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R6043	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R6044	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6046	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6048	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6049	ERDS2TJ102	C. RESISTOR 1/4W 1K	1	
R6050	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R6054	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R6055	ERJ6GEY0183	M. RESISTOR CH 1/10W 18K	1	
R6056-58	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R6059	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R6060	ERJ6GEY0822	M. RESISTOR CH 1/10W 8.2K	1	
R6061	ERJ6GEY0243	M. RESISTOR CH 1/10W 24K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7301	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	
R7302	ERJ3GEY0472	M. RESISTOR CH 1/16W 4.7K	1	
R7303	ERJ3GEY0152	M. RESISTOR CH 1/16W 1.5K	1	
R7308	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	1	
R7309, 10	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	2	
R7311	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7312	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R7313, 14	ERJ3GEY0272	M. RESISTOR CH 1/16W 2.7K	2	
R7315	ERJ3GEYJ114	M. RESISTOR CH 1/16W 110K	1	
R7316	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R7317	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R7320	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R7321-23	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	3	
R7324	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7325	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7326	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R7327-29	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	3	
R7330	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7332	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7333	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R7334-36	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	3	
R7337	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7339	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7341-43	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	3	
R7346	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R7350	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7351	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R7352-56	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	5	
R7357	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R7362	ERJ3GEY0682	M. RESISTOR CH 1/16W 6.8K	1	
R7366	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7367	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7368, 69	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	2	
R7370	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R7371	ERJ3GEY0102	M. RESISTOR CH 1/16W 1K	1	
R7376, 77	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	2	
R7378	ERJ3GEY0152	M. RESISTOR CH 1/16W 1.5K	1	
R7379	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7381	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7383	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R7601	ERJ6GEY0151	M. RESISTOR CH 1/10W 150	1	
R7602, 03	ERJ6GEYJ683	M. RESISTOR CH 1/10W 68K	2	
R7604	ERJ6GEY0151	M. RESISTOR CH 1/10W 150	1	
R7605-07	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	
R7612	ERG2SJ331	M. RESISTOR 2W 330	1	
R7614	ERJ6GEY0561	M. RESISTOR CH 1/10W 560	1	
R7615	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7616	ERG2SJ331	M. RESISTOR 2W 330	1	
R7618	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7619	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7622, 23	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R7624	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7625	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R7626	ERJ6GEY0222	M. RESISTOR CH 1/10W 2.2K	1	
R7703, 04	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	2	
R7705	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7706	ECUV1H100JCH	C. CAPACITOR CH 50V 10P	1	
R7707	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7708	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7709	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7711	ERJ6GEY0122	M. RESISTOR CH 1/10W 1.2K	1	
R7712, 13	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R7714-19	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	6	
R7722, 23	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	2	
R7725	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7726	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7727	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7732	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7733	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7735	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7736	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7737, 38	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7739	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7740	ERJ6GEY0911	M. RESISTOR CH 1/10W 910	1	
R7746	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7747	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7750	ERJ6GEYJ621	M. RESISTOR CH 1/10W 620	1	
R7751	ERJ6GEY0392	M. RESISTOR CH 1/10W 3.9K	1	
R7756	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R7757	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7758	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7761	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
R7766-68	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	3	
R7769	ERJ6GEY0273	M. RESISTOR CH 1/10W 27K	1	
R7770	ERJ6GEY0224	M. RESISTOR CH 1/10W 220K	1	
R7771	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7772	ERDS2TJ221	C. RESISTOR 1/4W 220	1	
R7773	ERJ6GEYJ223	M. RESISTOR CH 1/10W 22K	1	
R7774	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R7775	ERJ6GEY0473	M. RESISTOR CH 1/10W 47K	1	
R7776	ERJ6GEY0472	M. RESISTOR CH 1/10W 4.7K	1	
R7777	ERJ6GEYK225	M. RESISTOR CH 1/10W 2.2M	1	
R7778	ERJ6GEYJ105	M. RESISTOR CH 1/10W 1M	1	
R7779	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	1	
R7780	ERJ6GEY0271	M. RESISTOR CH 1/10W 270	1	
R7781	ERJ6GEY0224	M. RESISTOR CH 1/10W 220K	1	
R7782	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7785	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7786, 87	ERJ6GEYJ221	M. RESISTOR CH 1/10W 220	2	
R7788	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7789	ERJ6GEY0154	M. RESISTOR CH 1/10W 150K	1	
R7790	ERJ6GEYJ391	M. RESISTOR CH 1/10W 390	1	
R7791	ERJ6GEY0122	M. RESISTOR CH 1/10W 1.2K	1	
R7792	ERJ6GEY0821	M. RESISTOR CH 1/10W 820	1	
R7793	ERJ6GEY0182	M. RESISTOR CH 1/10W 1.8K	1	
RX7701	EXBF8E103J	RESISTOR-RESISTOR	1	
S6001	VES0700	SWITCH	1	
T0703	E0VSEC0071A	TRANSFORMER	1	
T0704	E0VSEC0072A	TRANSFORMER	1	
T4002	E1070F0140	TRANSFORMER	1	
⚠ TU7001	ENV47250G1	TUNER	1	[SUPPLIED FROM MBV]
VR0701	EVNCBAA00B24	V. RESISTOR 20K	1	
VR2001	EVNCYAA03B54	V. RESISTOR 50K	1	
VR3001, 02	EVNCYAA03B23	V. RESISTOR 2K	2	
VR3012, 13	EVNCYAA03B52	V. RESISTOR 500	2	
VR3014	EVNCYAA03B54	V. RESISTOR 50K	1	
VR4001	EVNCYAA03B15	V. RESISTOR 100K	1	
VR4501	EVNECSA00B83	V. RESISTOR 6.8K	1	
VR4508	EVNECSA00B53	V. RESISTOR 5K	1	
VR4550	EVNECSA00B14	V. RESISTOR 10K	1	
X301	VSX0162	CRYSTAL OSCILLATOR	1	
X0701	VLF1178	FILTER	1	
X0703	EFCS6R5MW5	FILTER	1	
X0704	VLF1368	FILTER	1	[SUPPLIED FROM MBV]
X6001	VSX0583	CRYSTAL OSCILLATOR	1	
X7302	VSX0877	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
X7303	EF0EC4004A4	CERAMIC OSCILLATOR	1	
X7702	VSX0353	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMP4904	SUPPORT ANGLE	2	
	VMD2329	PHOTO TRANSISTOR HOLDER	2	
	VMD2328	REEL GUIDE	1	
	VMD2330	LED HOLDER	1	
	VMT0332	SPACER	2	FOR NICAM DECODER C.B.A
	VSC3553	SHIELD COVER (MAIN)	1	FOR NICAM DECODER C.B.A
	VSC3555	SHIELD COVER (BOTTOM)	1	FOR NICAM DECODER C.B.A
	VMT0784	SPACER	1	FOR NICAM DECODER C.B.A
	VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
■	VEP03D06D	INPUT/OUTPUT C.B.A.		[SUPPLIED FROM MBV]
				(RTL)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3902	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3903	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3905	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3906	ECEA0JKA331	E. CAPACITOR 6.3V 330U	1	
C3907, 08	ECEA1CKA100	E. CAPACITOR 16V 10U	2	
C3917	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3918	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3919	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3920	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C3923	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C3924, 25	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	2	
C3926	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4901-08	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	8	
C4909	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4910, 11	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	2	
C4913	ECEA1CKA100	E. CAPACITOR 16V 10U	1	
C4914	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4915	ECEA1CKA470	E. CAPACITOR 16V 47U	1	
C4916, 17	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	2	
D3901, 02	MA4056-M	DIODE	2	
D3903	MA4120-M	DIODE	1	
D3905	MA151K	DIODE	1	
IC3902	MC14053BF	IC	1	
IC3903	MC14052BF	IC	1	
IC3908	MC14051BF	IC	1	
IC4001	MC14052BF	IC	1	
IC4002, 03	NJM4558M	IC	2	
IC4004	MC14052BF	IC	1	
JK3901	VEJ1767	I/O JACK BOARD	1	[SUPPLIED FROM MBV]
JK3902, 03	VJS1470	JACK	2	
K3902, 03	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
K4906	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
L3903, 04	VL00588J330	COIL 33UH	2	
L4903	VL00588J101	COIL 100UH	1	
L4904	VL00588J330	COIL 33UH	1	
P3901	VJS3637B0066	CONNECTOR (FEMALE) 6P	1	
PS3901	VJS3042B010W	CONNECTOR (FEMALE) 10P	1	
PS3902	VJS3042B008W	CONNECTOR (FEMALE) 8P	1	
PS3903	VJS3042B005W	CONNECTOR (FEMALE) 5P	1	
PS3904	VJS3042F013W	CONNECTOR (FEMALE) 13P	1	
Q3901, 02	2SD601	TRANSISTOR	2	
Q3903, 04	2SB709	TRANSISTOR	2	
Q3909	2SD1328	TRANSISTOR	1	
Q3910	2SB709	TRANSISTOR	1	
QR3901	UN2212	TRANSISTOR-RESISTOR	1	
QR3903	UN2212	TRANSISTOR-RESISTOR	1	
QR3904	UN2111	TRANSISTOR-RESISTOR	1	
R3901, 02	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	2	
R3903	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3904	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R3906	ERDS2TJ121	C. RESISTOR 1/4W 120	1	
R3907, 08	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	2	
R3910-12	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	3	
R3919	ERJ6GEY0683	M. RESISTOR CH 1/10W 68K	1	
R3920	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3921	ERJ6GEY0683	M. RESISTOR CH 1/10W 68K	1	
R3922	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3923, 24	ERJ6GEY0331	M. RESISTOR CH 1/10W 330	2	
R3925, 26	ERJ6GEY0121	M. RESISTOR CH 1/10W 120	2	
R3928, 29	ERJ6GEY0121	M. RESISTOR CH 1/10W 120	2	
R3930	ERJ6GEY0750	M. RESISTOR CH 1/10W 75	1	
R3932-34	ERJ6GEY0750	M. RESISTOR CH 1/10W 75	3	
R3935	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3937	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R3938	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3946	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	1	
R3947	ERDS2TJ561	C. RESISTOR 1/4W 560	1	
R3950	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R3953	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R3954	ERJ6GEY0104	M. RESISTOR CH 1/10W 100K	1	
R4901	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R4902	ERJ6GEY0474	M. RESISTOR CH 1/10W 470K	1	
R4903	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4904	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R4905	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R4906-13	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	8	
R4914, 15	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	2	
R4916	ERJ6GEY0752	M. RESISTOR CH 1/10W 7.5K	1	
R4917, 18	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R4919	ERJ6GEY0683	M. RESISTOR CH 1/10W 68K	1	
R4920	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	1	
R4921	ERJ6GEY0683	M. RESISTOR CH 1/10W 68K	1	
R4922	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	1	
R4924	ERJ6GEY0752	M. RESISTOR CH 1/10W 7.5K	1	
R4925, 26	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	2	
R4927, 28	ERJ6GEY0153	M. RESISTOR CH 1/10W 15K	2	
R4929	ERJ6GEY0474	M. RESISTOR CH 1/10W 470K	1	
R4930, 31	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
R4932, 33	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R4934, 35	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	2	
		MISCELLANEOUS		
	XTV3+8GFZ	SCREW	4	
■	VEP06340A	HEAD AMP C.B.A.		[SUPPLIED FROM MBV]
				(RTL)
C503	ECUM1C474ZFN	C. CAPACITOR CH 16V 0.47U	1	
C506	ECUM1C474ZFN	C. CAPACITOR CH 16V 0.47U	1	
C507	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C510	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C511	ECEA0JKA221	E. CAPACITOR 6.3V 220U	1	
C512	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1	
C513	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C514	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C515	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C516	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C517, 18	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2	
C519	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
D501, 02	1SS254	DIODE	2	
IC501	STV5728	IC	1	[SUPPLIED FROM MBV]
K501-06	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	6	
L502, 03	VL00588J330	COIL 33UH	2	
P501	VJS3537B0206	CONNECTOR (FEMALE) 20P	1	
P502	VJS3958	CONNECTOR (FEMALE) 11P	1	[SUPPLIED FROM MBV]
Q503, 04	2SD601	TRANSISTOR	2	
QR501, 02	UN2213	TRANSISTOR-RESISTOR	2	
R501	ERJ6GEYJ100	M. RESISTOR CH 1/10W 10	1	
R502	ERJ6GEY0621	M. RESISTOR CH 1/10W 620	1	
R504	ERJ6GEY0621	M. RESISTOR CH 1/10W 620	1	
R510	ERJ6GEY0184	M. RESISTOR CH 1/10W 180K	1	
R511	ERJ6GEY0152	M. RESISTOR CH 1/10W 1.5K	1	
R512	ERJ6GEY0621	M. RESISTOR CH 1/10W 620	1	
R513	ERJ6GEY0184	M. RESISTOR CH 1/10W 180K	1	
R514	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	1	
R515	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R516	ERJ6GEY0223	M. RESISTOR CH 1/10W 22K	1	
R517	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R518	ERJ6GEY0272	M. RESISTOR CH 1/10W 2.7K	1	
R519	ERJ6GEY0183	M. RESISTOR CH 1/10W 18K	1	
R520-22	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	3	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R523	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R524	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
		MISCELLANEOUS		
	VSC4630	SHIELD COVER (TOP)	1	[SUPPLIED FROM MBV]
	VSC4631	SHIELD COVER (MAIN)	1	[SUPPLIED FROM MBV]
	VSC3770	SHIELD COVER (BOTTOM)	1	
■	VEP07857D	TIMER C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625EG/EGM/EGM
C7501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7502	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7503	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C7504	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7506	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C7507	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7508	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C7509	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7510, 11	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C7514	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7515, 16	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7519, 20	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C7521	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
D7501	MA723-VT	DIODE	1	
D7502	MA4220-L	DIODE	1	
D7503-05	1SS254	DIODE	3	
D7509	HLMF-0205	DIODE	1	[SUPPLIED FROM MBV]
D7513, 14	SLR932AVA	DIODE	2	[SUPPLIED FROM MBV]
D7516	1SS254	DIODE	1	
D7527	1SS254	DIODE	1	
D7529-31	1SS254	DIODE	3	
D7533-36	1SS254	DIODE	4	
DP7501	VSL0468	DISPLAY TUBE	1	[SUPPLIED FROM MBV]
IC7501	PST7023	IC	1	
IC7502	S80743AL	IC	1	
IC7503	M37507V8AJ	IC	1	[SUPPLIED FROM MBV]
IR7501	RPM-6937-V11	IC	1	[SUPPLIED FROM MBV]
K7504	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
PP7501	VJP3405A011W	CONNECTOR (MALE) 11P	1	
PS7501	VJS3673B0256	CONNECTOR (FEMALE) 25P	1	
PS7502	VJS3673F0056	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
Q7501	2SB709	TRANSISTOR	1	
QR7506	UN2111	TRANSISTOR-RESISTOR	1	
R7501	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7502	ERDS2TJ8R2	C. RESISTOR 1/4W 8.2	1	
R7503, 04	ERJ6GEY0132	M. RESISTOR CH 1/10W 1.3K	2	
R7505	ERJ6GEY0331	M. RESISTOR CH 1/10W 330	1	
R7506	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R7507	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7508	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7509	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7510	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7511, 12	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	2	
R7513	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R7514	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7515	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7516	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7517	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7521-23	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	3	
R7524-26	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	3	
R7527	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7528	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7529	ERDS2TJ470	C. RESISTOR 1/4W 47	1	
R7532	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7533	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7534	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
S7501-03	EVQ11G08K	SWITCH	3	[SUPPLIED FROM MBV]
S7506	EVQ11G08K	SWITCH	1	[SUPPLIED FROM MBV]
S7508, 09	EVQ11G08K	SWITCH	2	[SUPPLIED FROM MBV]
S7512-14	EVQ11G08K	SWITCH	3	[SUPPLIED FROM MBV]
VC7501	ECRHA010A54R	V. CAPACITOR 50K	1	
X7501	VSX0608	CRYSTAL OSCILLATOR	1	
X7502	VSX0094	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMD2247	IR RECEIVER HOLDER	1	
	VJF1148	FIP HOLDER	1	
	VMD1047	LED SPACER	3	
■	VEP07957E	TIMER C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625B
C7501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7502	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7503	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C7504	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7506	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C7507	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7508	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C7509	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7510, 11	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C7514	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7515, 16	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7519, 20	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C7521	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
D7501	MA723-VT	DIODE	1	
D7502	MA4220-L	DIODE	1	
D7503-06	1SS254	DIODE	4	
D7509	HLMF-0205	DIODE	1	[SUPPLIED FROM MBV]
D7513, 14	SLR932AVA	DIODE	2	[SUPPLIED FROM MBV]
D7516	1SS254	DIODE	1	
D7518	1SS254	DIODE	1	
D7527	1SS254	DIODE	1	
D7529-31	1SS254	DIODE	3	
D7533-36	1SS254	DIODE	4	
DP7501	VSL0468	DISPLAY TUBE	1	[SUPPLIED FROM MBV]
IC7501	PST7023	IC	1	
IC7502	S80743AL	IC	1	
IC7503	M37507V6AJ	IC	1	[SUPPLIED FROM MBV]
IR7501	RPM-6937-V11	IC	1	[SUPPLIED FROM MBV]
K7504	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
PP7501	VJP3405A011W	CONNECTOR (MALE) 11P	1	
PS7501	VJS3673B025B	CONNECTOR (FEMALE) 25P	1	
PS7502	VJS3673F005B	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
Q7501	MSB709	TRANSISTOR	1	
QR7506	MUN2111	TRANSISTOR-RESISTOR	1	
R7501	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7502	ERDS2TJ8R2	C. RESISTOR 1/4W 8.2	1	
R7503, 04	ERJ6GEY0132	M. RESISTOR CH 1/10W 1.3K	2	
R7505	ERJ6GEY0331	M. RESISTOR CH 1/10W 330	1	
R7506	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R7507	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R7508	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7509	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7510	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7511, 12	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	2	
R7513	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R7514	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7515	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7516	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7517	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7521-23	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	3	
R7524-26	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	3	
R7527	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7528	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7529	ERDS2TJ470	C. RESISTOR 1/4W 47	1	
R7532	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7533	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7534	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7537	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
S7501-03	EVQ11G08K	SWITCH	3	[SUPPLIED FROM MBV]
S7506	EVQ11G08K	SWITCH	1	[SUPPLIED FROM MBV]
S7508, 09	EVQ11G08K	SWITCH	2	[SUPPLIED FROM MBV]
S7512-14	EVQ11G08K	SWITCH	3	[SUPPLIED FROM MBV]
VC7501	ECRHA010A54R	V. CAPACITOR 50K	1	
X7501	VSX0608	CRYSTAL OSCILLATOR	1	
X7502	VSX0094	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMD2247	IR RECEIVER HOLDER	1	
	VJF1148	FIP HOLDER	1	
	VMD1047	LED SPACER	3	
■	VEP07957F	TIMER C.B.A.		[SUPPLIED FROM MBV]
				(RTL) NV-HD625EC
C7501	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1	
C7502	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7503	ECA0JM221	E. CAPACITOR 6.3V 220U	1	
C7504	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7505	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C7506	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1	
C7507	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C7508	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C7509	ECEA1HKA100	E. CAPACITOR 50V 10U	1	
C7510, 11	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C7514	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	1	
C7515, 16	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C7519, 20	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C7521	ECEA0JKA470	E. CAPACITOR 6.3V 47U	1	
D7501	MA723-VT	DIODE	1	
D7502	MA4220-L	DIODE	1	
D7503-05	1SS254	DIODE	3	
D7509	HLMF-0205	DIODE	1	[SUPPLIED FROM MBV]
D7513, 14	SLR932AVA	DIODE	2	[SUPPLIED FROM MBV]
D7516	1SS254	DIODE	1	
D7518	1SS254	DIODE	1	
D7527	1SS254	DIODE	1	
D7529-31	1SS254	DIODE	3	
D7533-36	1SS254	DIODE	4	
DP7501	VSL0468	DISPLAY TUBE	1	[SUPPLIED FROM MBV]
IC7501	PST7023	IC	1	
IC7502	S80743AL	IC	1	
IC7503	M37507V6AJ	IC	1	[SUPPLIED FROM MBV]
IR7501	RPM-6937-V11	IC	1	[SUPPLIED FROM MBV]
K7504	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
PP7501	VJP3405A011W	CONNECTOR (MALE) 11P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
PS7501	VJS3673B025B	CONNECTOR (FEMALE) 25P	1	
PS7502	VJS3673F005B	CONNECTOR (FEMALE) 5P	1	[SUPPLIED FROM MBV]
Q7501	MSB709	TRANSISTOR	1	
QR7506	MUN2111	TRANSISTOR-RESISTOR	1	
R7501	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7502	ERDS2TJ8R2	C. RESISTOR 1/4W 8.2	1	
R7503, 04	ERJ6GEY0132	M. RESISTOR CH 1/10W 1.3K	2	
R7505	ERJ6GEY0331	M. RESISTOR CH 1/10W 330	1	
R7506	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R7507	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7508	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7509	ERJ6GEY0101	M. RESISTOR CH 1/10W 100	1	
R7510	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	1	
R7511, 12	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	2	
R7513	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R7514	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7515	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7516	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7517	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7521-23	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	3	
R7524-26	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	3	
R7527	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
R7528	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7529	ERDS2TJ470	C. RESISTOR 1/4W 47	1	
R7532	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7533	ERJ6GEY0221	M. RESISTOR CH 1/10W 220	1	
R7534	ERJ6GEY0332	M. RESISTOR CH 1/10W 3.3K	1	
R7537	ERJ6GEY0103	M. RESISTOR CH 1/10W 10K	1	
S7501-03	EVQ11G08K	SWITCH	3	[SUPPLIED FROM MBV]
S7506	EVQ11G08K	SWITCH	1	[SUPPLIED FROM MBV]
S7508, 09	EVQ11G08K	SWITCH	2	[SUPPLIED FROM MBV]
S7512-14	EVQ11G08K	SWITCH	3	[SUPPLIED FROM MBV]
VC7501	ECRHA010A54R	V. CAPACITOR 50K	1	
X7501	VSX0608	CRYSTAL OSCILLATOR	1	
X7502	VSX0094	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMD2247	IR RECEIVER HOLDER	1	
	VJF1148	FIP HOLDER	1	
	VMD1047	LED SPACER	3	
■	VEP06808B	OPERATION C.B.A.		[SUPPLIED FROM MBV]
				(RTL)
C6501, 02	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	2	
C6514	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C6515	VCE0073	SUPER CAPACITOR	1	
D6508	SLR932AVA	DIODE	1	[SUPPLIED FROM MBV]
JK6502	VJJ0419	JACK	1	[SUPPLIED FROM MBV]
P6501	VJS3537B006B	CONNECTOR (FEMALE) 6P	1	
PS6501	VJS3405A011A	CONNECTOR (FEMALE) 11P	1	
Q6502	2SD1994	TRANSISTOR	1	
R6501	ERJ6GEY0750	M. RESISTOR CH 1/10W 75	1	
R6502, 03	ERJ6GEY0102	M. RESISTOR CH 1/10W 1K	2	
R6519	ERDS2TJ150	C. RESISTOR 1/4W 15	1	
R6520	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R6528	ERJ6GEY0181	M. RESISTOR CH 1/10W 180	1	
S6501, 02	EVQ11G08K	SWITCH	2	[SUPPLIED FROM MBV]
S6504	EVQ11G08K	SWITCH	1	[SUPPLIED FROM MBV]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMD2591	LED HOLDER	1	[SUPPLIED FROM MBV]
⚠ ■	VEP01763C	POWER C.B.A.		[SUPPLIED FROM MBV]
				(RTL)
⚠ C1101	ECKNNS102MEF	C. CAPACITOR 1000P	1	
⚠ C1104	ECKNNS102MEF	C. CAPACITOR 1000P	1	
C1106	ECQE6104KF	P. CAPACITOR 0.1U	1	
⚠ C1107	ECKNNS102MEF	C. CAPACITOR 1000P	1	
⚠ C1110, 11	VCF2AAF104M	P. CAPACITOR 100V 0.1U	2	[SUPPLIED FROM MBV]
C1112	ECEC2GG330	E. CAPACITOR 400V 33U	1	
C1113	ECKD2H103PU	C. CAPACITOR 500V 0.01U	1	
C1114	ECCD3A470KBE	C. CAPACITOR 1KV 47P	1	
C1115	ECA1VHE470K	E. CAPACITOR 35V 47U	1	
C1116	ECEA1HHE470	E. CAPACITOR 50V 47U	1	
C1117	ECQV1H104JM	P. CAPACITOR 63V 0.1U	1	
C1118	ECKF1H102KB	C. CAPACITOR 50V 1000P	1	
C1120	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
C1121	EEUFA1E681	E. CAPASITOR 25V 680U	1	
C1122	ECEA1EGE221	E. CAPACITOR 25V 220U	1	
C1123	ECKR2H101KB	C. CAPACITOR 500V 100P	1	
C1124	EEUFA1A122	E. CAPASITOR 10V 1200U	1	
C1125	ECEA1AGE331	E. CAPACITOR 10V 330U	1	
C1127	ECA1HFQ560	E. CAPACITOR 50V 56U	1	
C1128	ECKF1H103ZF	C. CAPACITOR 50V 0.01U	1	
C1129	ECKD2H151KB	C. CAPACITOR 500V 150P	1	
C1130	ECA1VFQ560	E. CAPACITOR 35V 56U	1	
C1131	ECKF1H103ZF	C. CAPACITOR 50V 0.01U	1	
C1133	ECA0JFQ221	E. CAPACITOR 6.3V 220U	1	
C1134, 35	ECQB1H103JF	P. CAPACITOR 50V 0.01U	2	
C1136	ECKF1H391KB	C. CAPACITOR 50V 390P	1	
C1147	ECKF1H102KB	C. CAPACITOR 50V 1000P	1	
C1148	ECQV1H104JM	P. CAPACITOR 63V 0.1U	1	
C1150	ECQB1H103JF	P. CAPACITOR 50V 0.01U	1	
D1102	S1WBA60S	DIODE	1	
D1103	AP01C	DIODE	1	
D1104	MA165	DIODE	1	
D1108	MD100E	DIODE	1	
D1109, 10	ERA15-06	DIODE	2	
D1121	MA2ZLF-C4	DIODE	1	
D1122	21DQ04	DIODE	1	
D1123	ERA22-02	DIODE	1	
D1124	MA165	DIODE	1	
D1125	11EQS04	DIODE	1	
D1126	MA4043-L	DIODE	1	
D1127	1SS254	DIODE	1	
D1129	MA4030-H	DIODE	1	
⚠ F1101	XBA2C16TR5	FUSE	1	
IC1101	TDA4605-3	IC	1	
⚠ IP1101	VSF0015A10	IC PROTECTOR	1	
⚠ L1107	ELF18D221F	COIL 220UH	1	
⚠ L1108	ELF18D290A	COIL 29UH	1	
L1121, 22	VLQ0055K220	COIL 22UH	2	
L1123, 24	ELESE101KA	INDUCTOR 100UH	2	
LB1101	VLP0085	COIL	1	
LB1102	VLP0074	COIL	1	
LB1107	VLP0085	COIL	1	
⚠ P1101	VJS3306	AC INLET	1	
P1102	VJP3631A011W	CONNECTOR (MALE) 11P	1	
Q1101	STP3N60FI-B	TRANSISTOR	1	
Q1102	2SD1991A	TRANSISTOR	1	
⚠ Q1111	CNX82AS387	PHOTO COUPLER	1	[SUPPLIED FROM MBV]
QR1101	UN6114	TRANSISTOR-RESISTOR	1	
QR1103	UN4213	TRANSISTOR-RESISTOR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R1103	ERG1SJ393	M. RESISTOR 1W 39K	1	
R1104	ERDS2TJ391	C. RESISTOR 1/4W 390	1	
R1107	ERDS2FJ104	C. RESISTOR 1/4W 100K	1	[SUPPLIED FROM MBV]
R1108	ERDS2FJ105	C. RESISTOR 1/4W 1M	1	
R1109	ERDS2FJ221	C. RESISTOR 1/4W 220	1	
R1110	ERDS2FJ822	C. RESISTOR 1/4W 8.2K	1	
R1111	ERDS2FJ222	C. RESISTOR 1/4W 2.2K	1	
R1112	ERDS2FJ304	C. RESISTOR 1/4W 300K	1	
R1113	ERDS2FJ474	C. RESISTOR 1/4W 470K	1	
R1114	ERX12SJR75	M. RESISTOR 1/2W 0.75	1	
R1115	ERDS2FJ103	C. RESISTOR 1/4W 10K	1	
R1116	ERDS2FJ100	C. RESISTOR 1/4W 10	1	
R1117	ERDS2FJ472	C. RESISTOR 1/4W 4.7K	1	
R1118	ERG1SJ100	M. RESISTOR 1W 10	1	
R1122	ERC12ABK334	S. RESISTOR 1/2W 330K	1	
R1125	ERDS2TJ271	C. RESISTOR 1/4W 270	1	
R1128	ERDS2FJ332	C. RESISTOR 1/4W 3.3K	1	
R1129	ERDS2FJ123	C. RESISTOR 1/4W 12K	1	
R1133	ERDS2FJ474	C. RESISTOR 1/4W 470K	1	
R1135	ERDS2FJ274	C. RESISTOR 1/4W 270K	1	
⚠ T1101	VLT0082	TRANSFORMER	1	[SUPPLIED FROM MBV]
		MISCELLANEOUS		
⚠	EYF52BC	FUSE HOLDER	2	
	VSC4205	SHIELD COVER	1	
	VMP4717	AC PLATE	1	
	VHD0418	SCREW	1	
⚠	VMZ2212	CAPACITOR COVER	2	
⚠	VMZ2304	BARRIER	1	
■	————	CYLINDER STATOR C.B.A.		
		MISCELLANEOUS		
	HW-300A-CF	HALL IC	1	
	VJS3537B0096	CONNECTOR (FEMALE) 9P	1	
■	————	MOTOR C.B.A.		
		MISCELLANEOUS		
	VJP3316B002	CONNECTOR (MALE) 2P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks

INTERNAL REFERENCE CODES	
Note:This chart is only for internal reference. Do not order any parts according to these codes.	
P.C.B.	FILM CODE
MAIN	HOAO02-06B97
LUMINANCE & CHROMINANCE	HOAO00-03D95
HIFI AUDIO	HOAO00-04644
INPUT/OUTPUT	HOAO00-03D96
TIMER SYUGO	HOAO00-0393A
TV DEMODULATOR	HOAO00-07801
DECODER(EG/EGH/EGM)	HOAO01-07784
NICAM DECODER(B/EC)	HOAO00-07787
POWER	HOAO02-01763
HEAD AMP	HOAO00-05349
CYLINDER DRIVE	HOAO01-00V01
LOADING MOTOR	HOAO00-00S75

ORDER NO. VSD9402M632

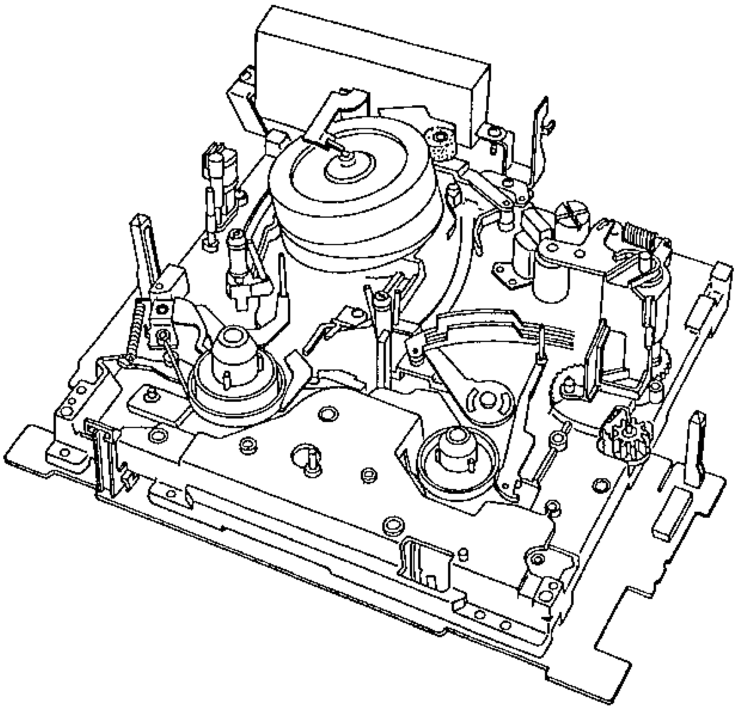
Service Manual

Video Cassette Recorder

VHS
PAL

- Sec. 1 *General Information*
- Sec. 2 *Maintenance Procedures*
- Sec. 3 *Mechanical Adjustment Procedur*
- Sec. 4 *Assembly & Phase Adjustment Procedure*

K-MECHANISM



IMPORTANT

The K-MECHANISM chassis are built in several Panasonic SVHS／VHS Video Cassette Recorder.

Thus, Properly file this service manual with the service manual of the relative video cassette recorder.

Panasonic

INTRODUCTION

This Service Manual contains the technical information which service personnel to understand and service the K-Mechanism.

The Maintenance Chart, Mechanical Parts List and Mechanical Specification, please refer to the service manual of each model.

CONTENTS

SECTION 1 GENERAL INFORMATION 1-1
- 1-1. FEATURE of K MECHANISM 1-1
  - 1-1-1. Parts Reduction 1-1
  - 1-1-2. No Adjustment of the following is required 1-1
  - 1-1-3. Reduced Gear Phase Position Alignments 1-1
- 1-2. OPERATION of K-MECHANISM 1-1
- 1-3. EMERGENCY CASSETTE REMOVAL 1-1
- 1-4. EJECT OPERATION 1-2
- 1-5. REMOVAL of MECHANISM 1-2
  - 1-5-1. Removal of Top Plate 1-2
  - 1-5-2. Removal of Mechanism Chassis 1-3
  - 1-5-3. Removal of Mechanism Connection C.B.A. 1-3
- 1-6. SERVICE FIXTURES AND TOOLS 1-4
- 1-7. Mechanical Parts Location 1-5

SECTION 2 MAINTENANCE PROCEDURE 2-1
- 2-1. Replacement of the Upper Cylinder Unit 2-1
- 2-2. Replacement of Cylinder Unit 2-2
- 2-3. Replacement of A/C HEAD Unit 2-2
- 2-4. Replacement of Full Erase Head Unit 2-3
- 2-5. Replacement of Capstan Rotor Unit and Stator Unit 2-3
- 2-6. Replacement of Impedance Roller Unit 2-3
- 2-7. Replacement of Pinch Arm Unit 2-4
- 2-8. Replacement of Take-up and Supply Reel Base Units 2-4
- 2-9. Replacement of Take-up and Supply Brake Arm Unit 2-5
- 2-10.Replacement of Tension Band Unit 2-5
- 2-11.Replacement of Loading Motor Unit 2-6
- 2-12.Replacement of Cleaner Roller Unit 2-6
- 2-13.Replacement of SS Brake Base Unit and Timing Belt 2-7
- 2-14.Replacement of Supply & Take-up Inclined Base Unit 2-7

SECTION 3 MECHANICAL ADJUSTMENT PROCEDURE 3-1
- 3-1. Coarse Adjustment of Tape Guide Post Heigth 3-1
- 3-2. Fine Adjustment of P2 and P3 Posts 3-2
- 3-3. Coarse Adjustment of A/C Head Height (1) 3-2
- 3-4. Coarse Adjustment of A/C Head Height (2) 3-3
- 3-5. Fine Adjustment of A/C Head Height 3-3
- 3-6. Horizontal Position Adjustment of A/C Head 3-3
- 3-7. Adjustment of Tension Post Position 3-4
- 3-8. Adjustment of Back Tension 3-4
- 3-9. Adjustment of Capstan Housing & Stator 3-5
- 3-10.Adjustment of Thrust Gap 3-6
- 3-11.Adjustment of FG GAP 3-6
- 3-12.Pressing Force Confirmation of the Pressure Roller 3-6

SECTION 4 ASSEMBLY & PHASE ADJUSTMENT PROCEDURE 4-1
- 4-1. Assembly Procedures of Mechanism 4-1
- 4-2. Assembly of parts on the Top Chassis 4-2
- 4-3. Assembly of parts on the Bottom Chassis 4-2
- 4-4. Assembly of Main Cam Gear and Sub Cam Gear 4-3
- 4-5. Assembly of Mode Switch 4-3
- 4-6. Assembly of Take-up and Supply Loading Gears 4-4
- 4-7. Assembly of Main Lever 4-4
- 4-8. Reinstall of the Cassette Compartment 4-6

SECTION 1
GENERAL INFORMATION

The K mechanism maintains the same high performance as G2 mechanism but with a smaller quantity of mounted parts, 40% less than G2 mechanism.

1-1. FEATURE of K MECHANISM

1-1-1. Parts Reduction

<K Mechanism>

a. Reduction in the number of drive parts through the use of a single motor to perform front loading and unit loading.
b. Direct drive of brakes and loading gears with the multi-function main lever.
c. Elimination of sub lever and solenoids.

<Front Loading Unit>

a. Elimination of a slide switch, to reduce wiring.
b. Elimination or combining the joint parts.
c. Smaller and thinner the top plate and rack parts.

1-1-2. No Adjustment of the following is required.

a. Take-up inclined position.
b. P5 Post height.

1-1-3. Reduced Gear Phase Position Alignments

The K Mechanism has only 6 gear phase alignment positions and G2 mechanism has 12 gear phase alignment positions.

1-2. OPERATION of K-MECHANISM

The K mechanism has two motors, the loading motor and capstan motor. The loading motor operates the front loading/unloading and tape loading/unloading. The capstan motor operates each mode.
The bottom C.B.A. connects the mechanism to the system control circuit. On the bottom C.B.A. there are take-up and supply photo-sensors, Sensor LED, Mode Switch Connector, Safety Tab Switch, Supply and Take-up Reel Sensors and Loading Motor Connector. All sensor information sent to the system control circuit.

1-3. EMERGENCY CASSETTE REMOVAL

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to removing cassette manually.
There are 2 methods of removing the cassette.

A. Battery Operation

1. Remove the bottom plate.
2. Connect the battery (Manganese-Type (AA)(R6) 3pcs./+4.5V) to P1503 as shown in Fig.G1.
3. After moving the loading post to the unloaded position, disconnect the battery to stop the loading motor.
4. Turn the capstan rotor clockwise to take up the tape.
5. Reconnect the battery to eject the cassette.

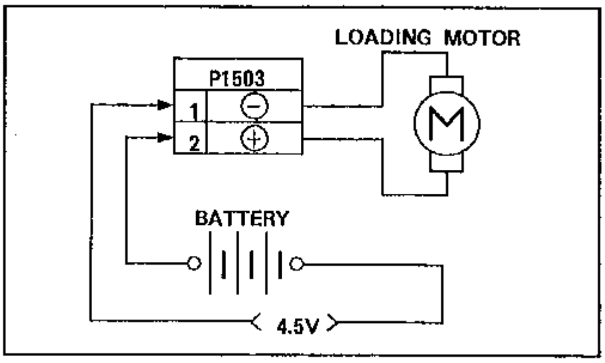


Fig.G1

B. Hand Operation

1. Remove the bottom plate.
2. Turn the worm gear to arrow mark direction (A) by finger as shown in Fig.G2 until loading post move to unloading position.
3. Turn the capstan rotor clockwise (B) to take up the tape.
4. Turn the worm gear again to eject the cassette.

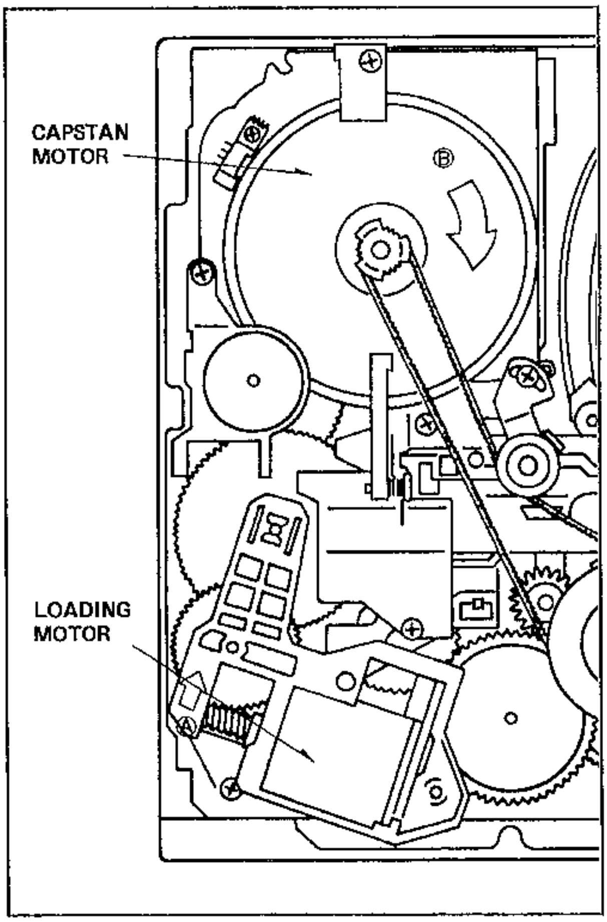

CAPSTAN MOTOR
Ⓑ
LOADING MOTOR
Ⓐ

Fig.G2

1-4. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

If the Eject operation is performed without the cassette installed while repairing or making the mechanical phase alignment, the main cam gear will not rotate. For performing the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

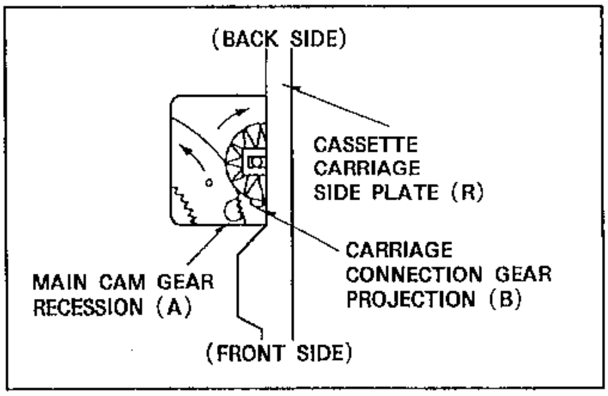

(BACK SIDE)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(FRONT SIDE)

Fig.G3

1-5. REMOVAL of MECHANISM

1-5-1. Removal of Top Plate

1. Unscrew 2 screws (A) and unlock 4 locking tabs to arrow direction as shown in Fig.G4.
2. Lift up the Top Plate.

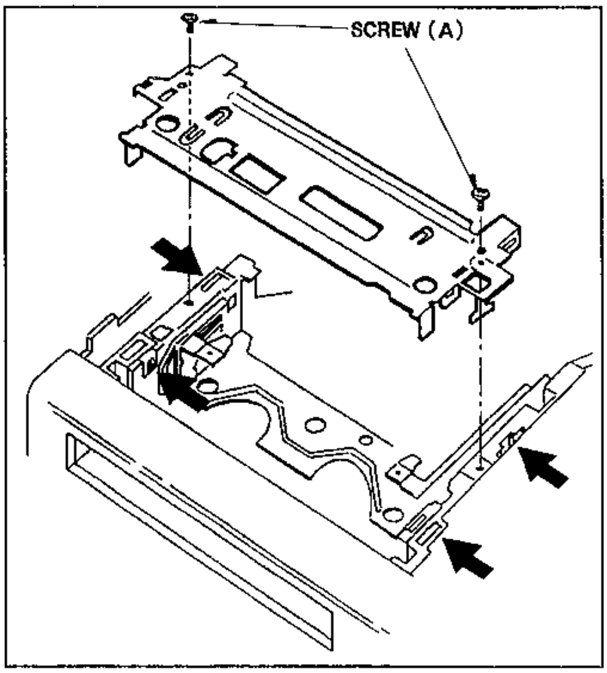


Fig.G4

1-5-2. Removal of Mechanism Chassis

1. Unscrew 2 screws (A) push the Holder Plate slightly to rear of the mechanism.
2. Unscrew a screw (B).
3. Disconnect all cable and connectors on the mechanism chassis.
   1)FE Head connector
   2)A/C Head connector
   3)Power Transistor connector
   4)Head Amp connector
   5)Capstan cable
4. Disconnect a Dew Sensor connector on the MAIN C.B.A.
5. Lift the mechanism chassis slightly and disconnect a connector of Cylinder Motor and a cable of Mechanism Connection C.B.A.
   Then mechanism chassis out of the unit.

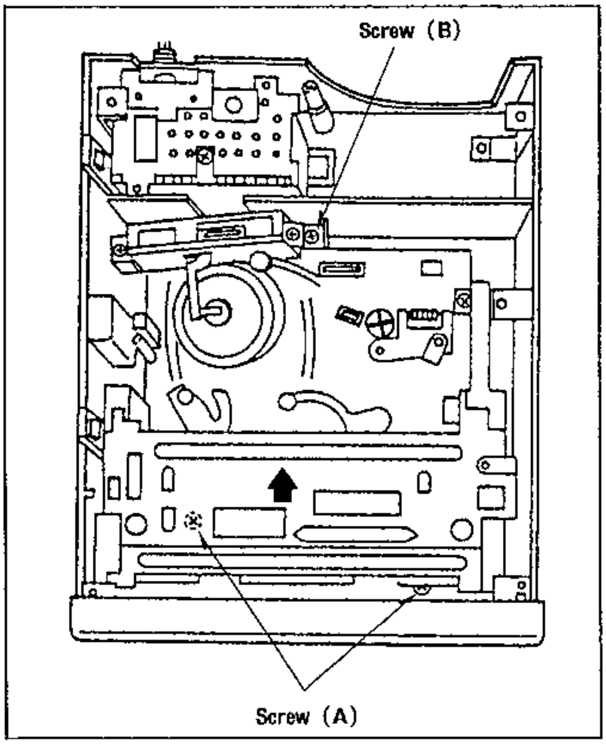


Fig.G5

1-5-3. Removal of Mechanism Connection C.B.A.

1. Unscrew 4 screws (C).
2. Lift up the Mechanism Connection C.B.A.

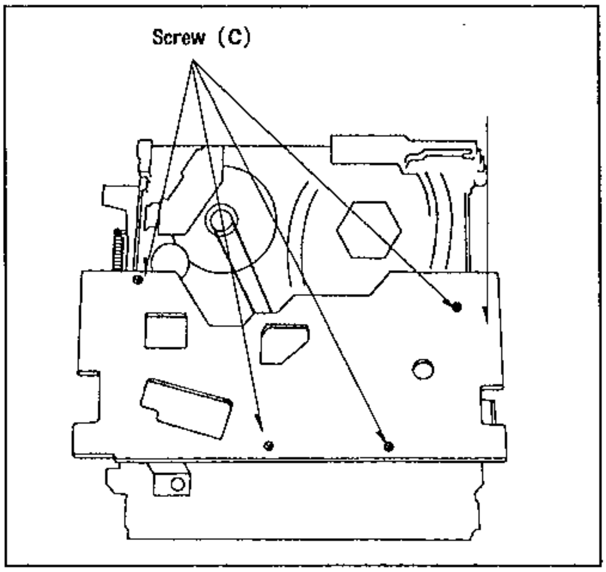
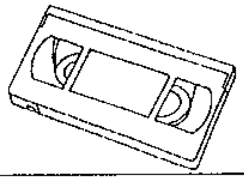
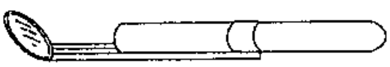
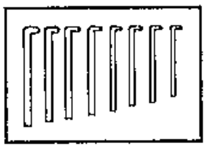
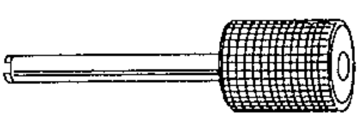
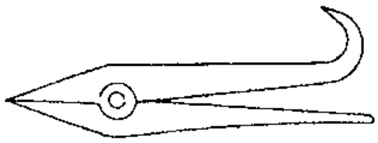
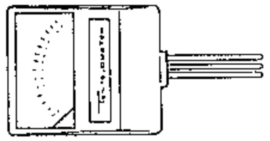
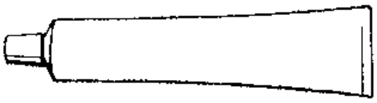
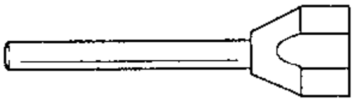
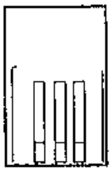
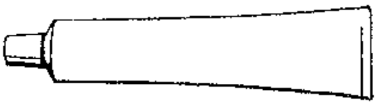
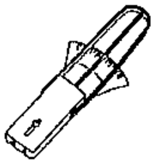
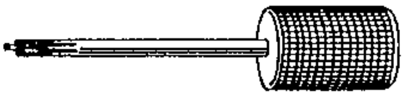


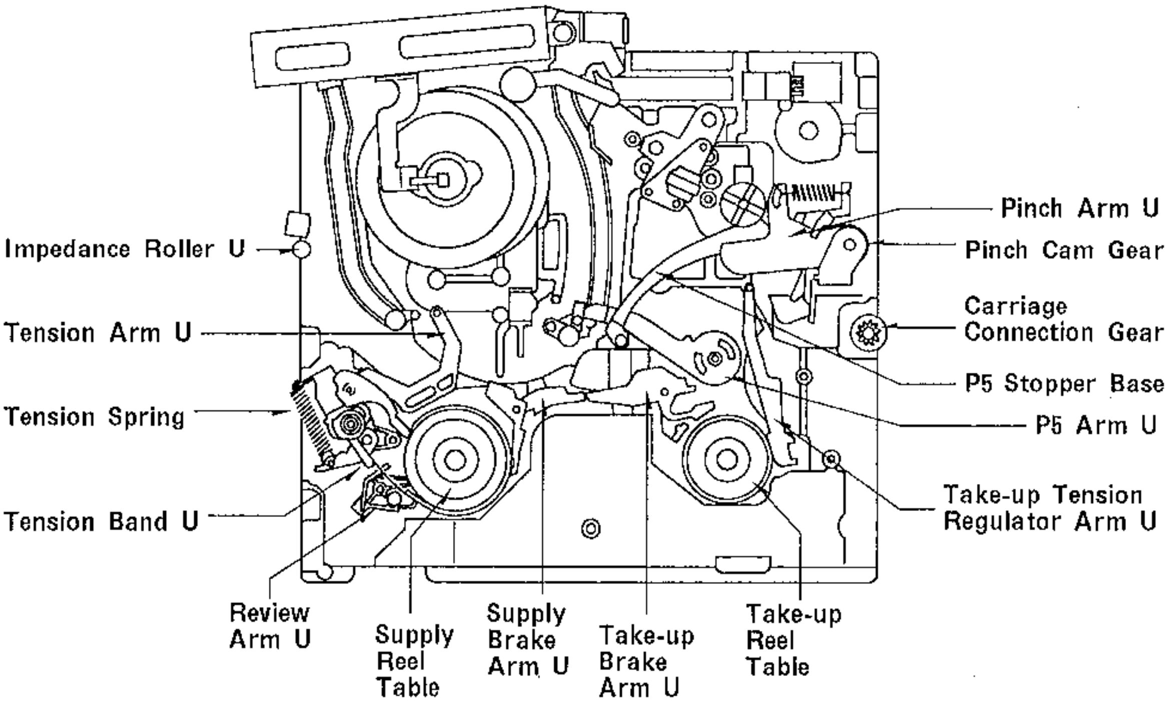
Fig.G6

1-6. SERVICE FIXTURES AND TOOLS

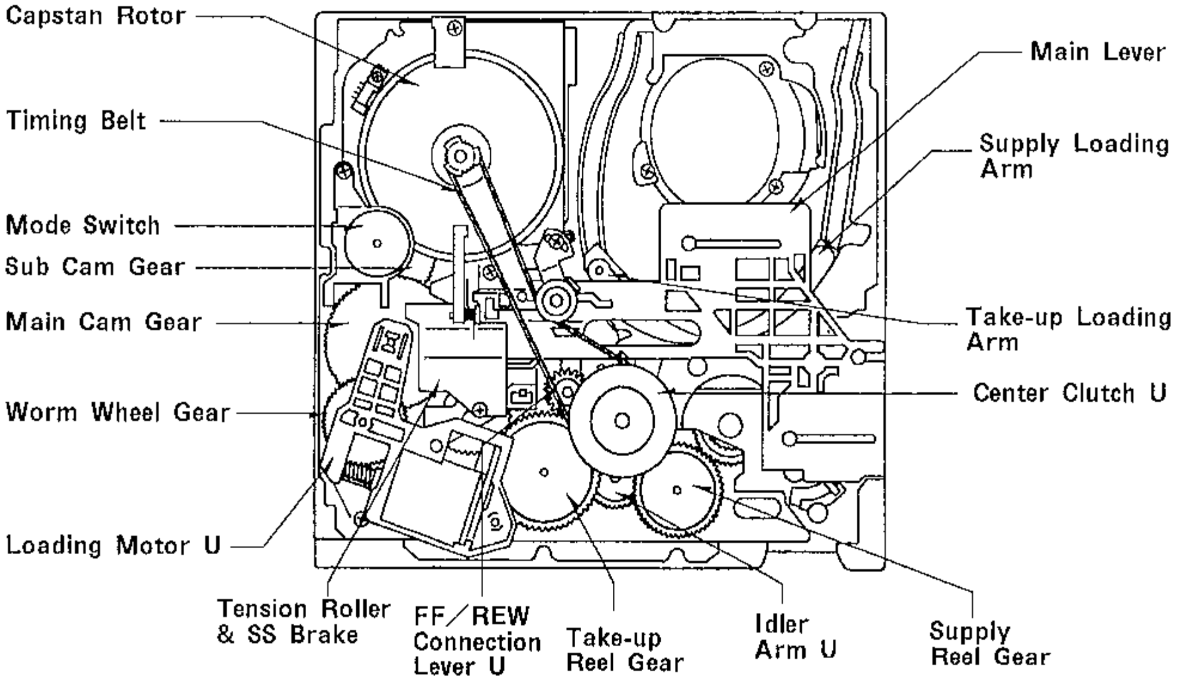
The regular maintenance is important to maintain the initial specification of the unit and prevent tape damage. The specified servicing fixture must be used to conduct adjustment.
The following fixtures, tools and measuring equipments are required to conduct complete Mechanical Adjustments.

VFM8080HQFP: VHS Alignment Tape 	VFK0948: Check Light 	VFK0326: Hex Wrench Set (0.7, 0.9, 1.2, 1.5, 1.6, 2.0, 2.4, 3.0mm) 
VFK0329: Post Adj. Screwdriver 	VFK0335: Retaining Ring Remover 	VFK0132: Back Tension Meter (Tentelometer,Made in U.S.A.) 
MOR265: Morlytone Grease (Black) (for metal parts) 	VFK0851: Center Fixing Tool 	VFK27: Head Cleaning Stick 
VFK0680: S.C.R. Grease (White) (for plastic parts) 	VFK66 ; Fan Type Tension Gauge 	VFK0330: Fine Adj. Screwdriver 

1-7. Mechanical Parts Location


Impedance Roller U
Tension Arm U
Tension Spring
Tension Band U
Review Arm U
Supply Reel Table
Supply Brake Arm U
Take-up Brake Arm U
Take-up Reel Table
Pinch Arm U
Pinch Cam Gear
Carriage Connection Gear
P5 Stopper Base
P5 Arm U
Take-up Tension Regulator Arm U

《TOP VIEW》


Capstan Rotor
Timing Belt
Mode Switch
Sub Cam Gear
Main Cam Gear
Worm Wheel Gear
Loading Motor U
Tension Roller & SS Brake
FF/REW Connection Lever U
Take-up Reel Gear
Idler Arm U
Supply Reel Gear
Main Lever
Supply Loading Arm
Take-up Loading Arm
Center Clutch U

《BOTTOM VIEW》

SECTION 2
MAINTENANCE PROCEDURE

The MAINTENANCE CHART please refer to the Maintenance Section which are shown in service manual for each model.

2-1. Replacement of the Upper Cylinder Unit

1. Unscrew 2 screws (A).
2. Unsolder arrows marked portions on the top of the Upper Cylinder as shown in Fig.M1.
3. Remove the Upper Cylinder.
4. The Upper Cylinder can be reinstalled by reversing the removal procedure.
   However, when insert the Upper Cylinder be extremely carefully so that marked portion of P.C.board of the Upper Cylinder correctly matches to mark of the Lower Cylinder as shown in Fig.M2.

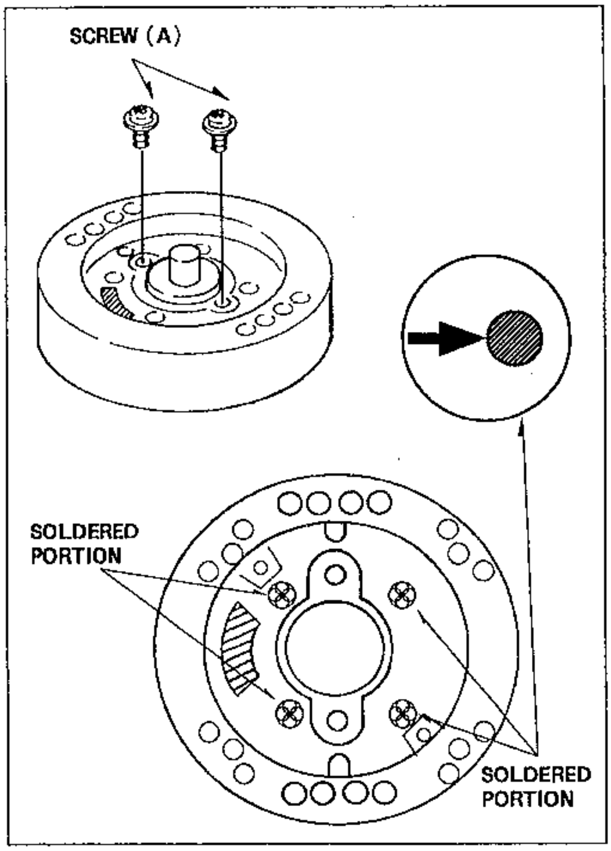


Fig.M1

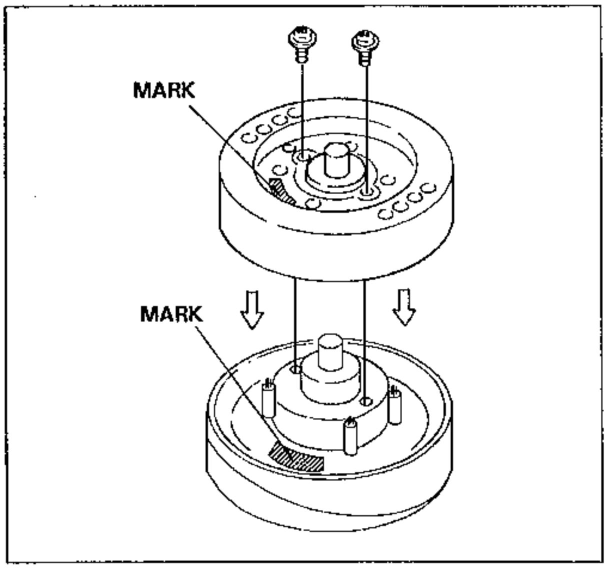


Fig.M2

<NOTE>
After reinstall the Upper Cylinder Unit should be perform Mechanical and Electrical adjustments.

3-2. FINE ADJUSTMENT of P2 and P3 POSTS
3-6. HORIZONTAL POSITION ADJUSTMENT

2-2. Replacement of Cylinder Unit

1. Remove the Earth Plate.
2. Unscrew 2 screws both side of Head Amp Unit and lift up the Head AMP.
3. Unscrew 3 screws (B) from back side of the mechanical chassis then remove the Cylinder Unit.
4. The Cylinder Unit can be reinstalled by reversing the removal procedure.

<Note>

After reinstall the Cylinder Unit should be perform Mechanical and Electrical adjustments.

3-2. FINE ADJUSTMENT of P2 and P3 POSTS
3-6. HORIZONTAL POSITION ADJUSTMENT

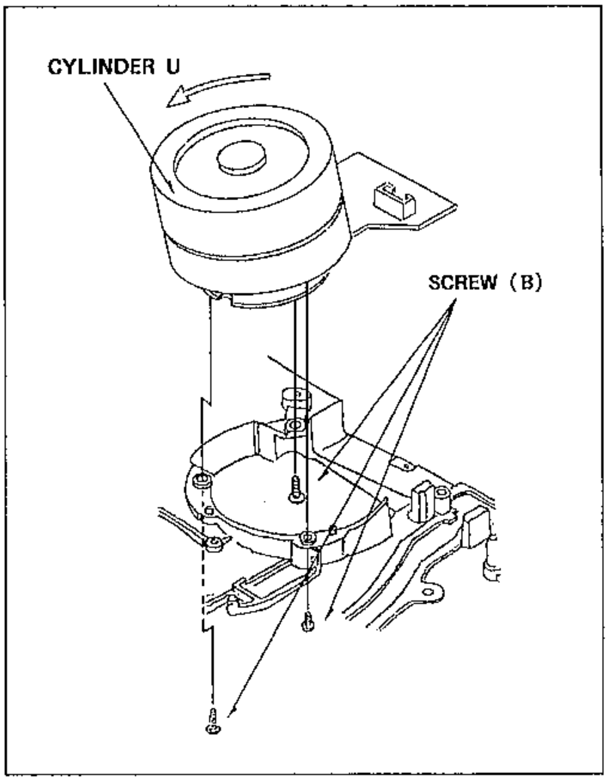


Fig.M3

2-3. Replacement of A/C HEAD Unit

1. Unscrew 3 screws (C)(D)(E) with the 3 springs then remove the A/C Head unit from the A/C Head Base.
2. The A/C Head Unit can be reinstalled by reversing the removal procedure.

<Note>

A space should be equality between the A/C Head U and the A/C Head Base when reinstall the A/C Head unit.

After reinstall the A/C Head Unit should be perform Mechanical and Electrical adjustments.

3-2. FINE ADJUSTMENT of P2 and P3 POSTS
3-3. COARSE ADJUSTMENT of A/C HEAD HEIGHT(1)
3-4. COARSE ADJUSTMENT of A/C HEAD HEIGHT(2)
3-5. FINE ADJUSTMENT of A/C HEAD HEIGHT
3-6. HORIZONTAL POSITION ADJUSTMENT

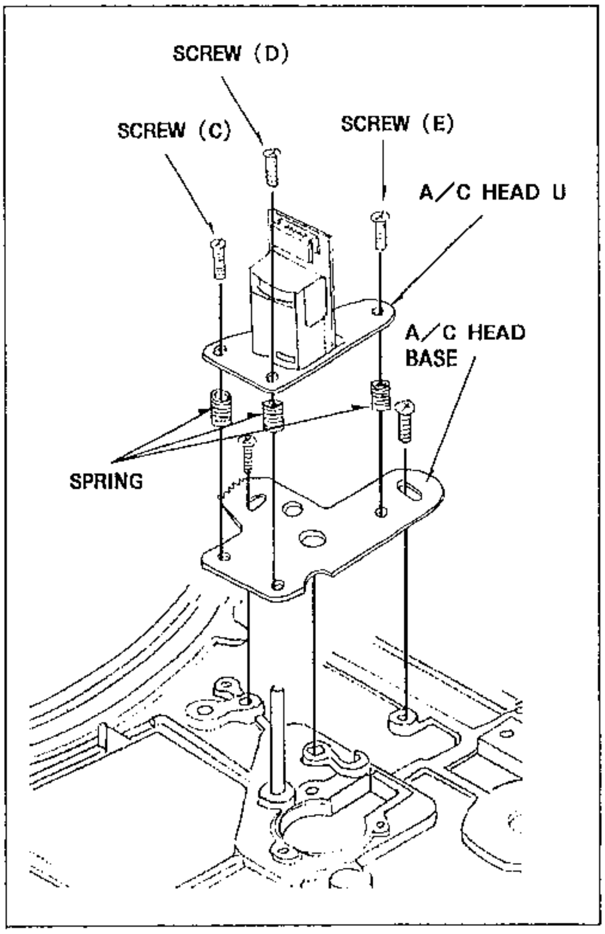


Fig.M4

2-4. Replacement of Full Erase Head Unit

1. Disconnect a connector (A).
2. Unscrew screw (F) then remove the FE Head.
3. FE Head Unit put into hole on the mechanical chassis and can be reinstalled by reversing the removal procedure.

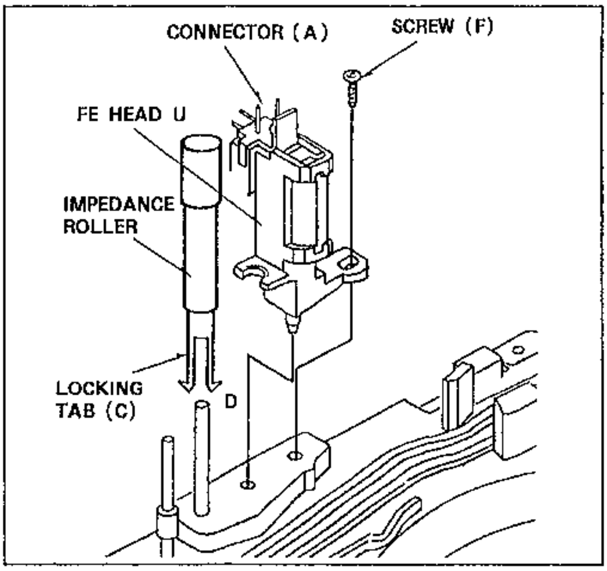


Fig.M5

2-5. Replacement of Capstan Rotor Unit and Stator Unit

1. Remove the Rotor Stopper.
2. Carefully lift up the Capstan Rotor from the Capstan Housing, taking care so as not loose the 2 Oil Seals.
3. Unscrew 3 screws (G) and remove the Capstan Stator Unit as shown in Fig.M6.
4. The Capstan Rotor and Stator can be reinstalled by reversing the removal procedure.

<Note>

After reinstall the Capstan Rotor and Stator Units should be perform Mechanical adjustment.

3-9. ADJUSTMENT of CAPSTAN HOUSING & STATOR
3-10. ADJUSTMENT of THRUST GAP
3-11. ADJUSTMENT of FG GAP

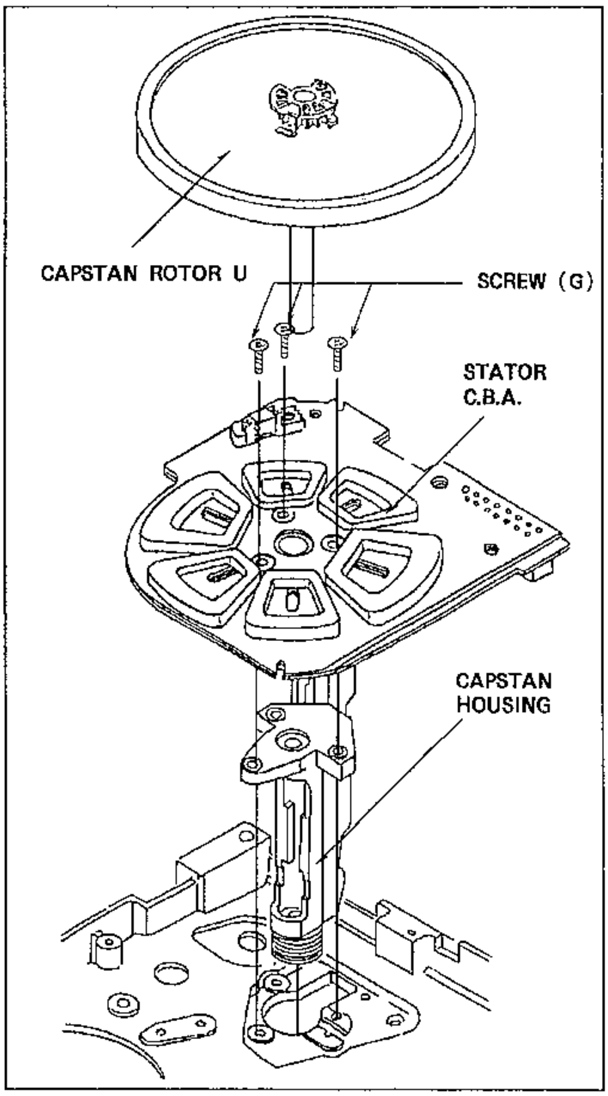


Fig.M6

2-6. Replacement of Impedance Roller Unit

1. Remove the Full Erase Head Unit with removal procedure(2-4).
2. Unlock then locking tab to direction of arrow mark as shown in Fig.M5 and remove the Impedance Roller Unit.
3. The Impedance Roller Unit can be reinstalled by reversing the removal procedure.

2-7. Replacement of Pinch Arm Unit

1. Unlock the locking tab on the Opener Piece and remove it from the shaft.
2. Remove the Pinch Arm Unit from the shaft.
3. The Pinch Arm Unit can be reinstalled by reversing the removal procedure.

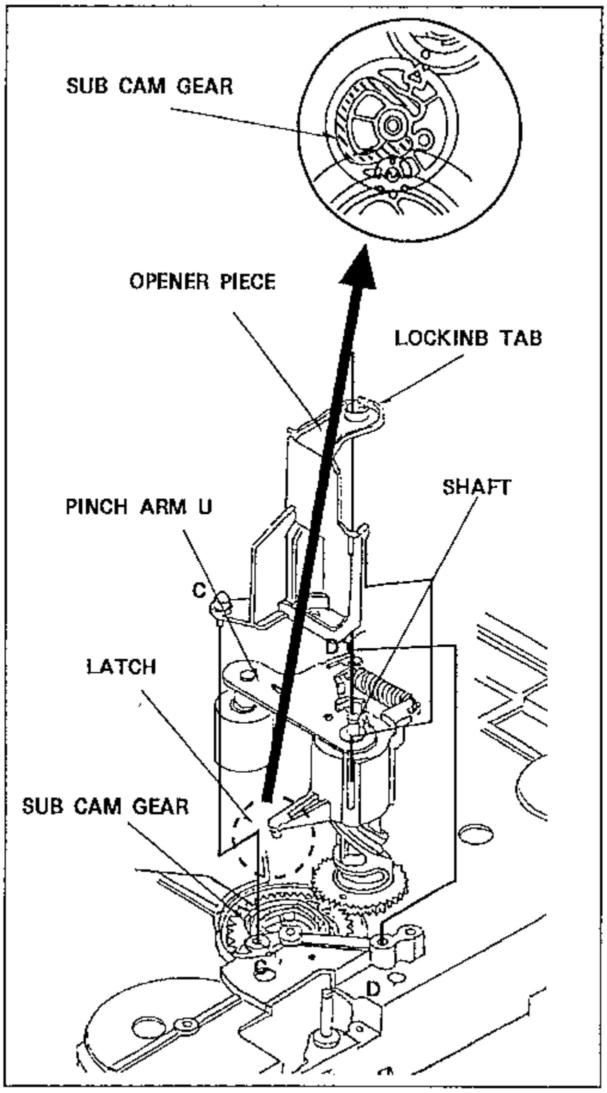

SUB CAM GEAR
OPENER PIECE
LOCKINB TAB
SHAFT
PINCH ARM U
C
LATCH
D
SUB CAM GEAR
C
D

Fig.M7

2-8. Replacement of Take-up and Supply Reel Base Units

A. Supply Reel Base Unit

1. Remove the Tension Band Unit on the Supply Reel Base Unit.
2. Push the Supply main Brake Arm to direction of arrow mark and unlock the locking tab on the Supply Reel Base then pull up the Supply Reel Base Unit as shown in Fig.M8.
3. The Supply Reel Base Unit can be reinstalled by reversing the removal procedure.

B. Take-up Reel Base Unit

1. Push the Take-up Main Brake Arm to direction of arrow mark and unlock the locking tab on the top of Take-up Reel Base then pull out the Supply Reel Base Unit as shown in Fig.M8.

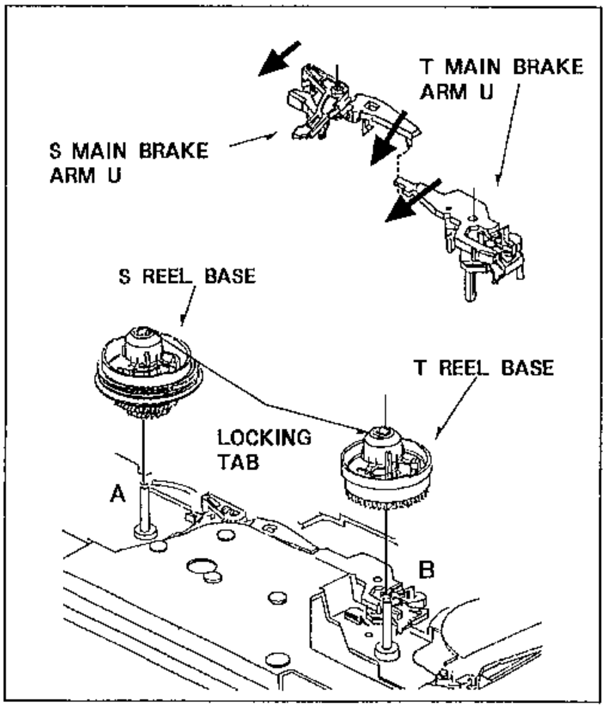

T MAIN BRAKE ARM U
S MAIN BRAKE ARM U
S REEL BASE
T REEL BASE
LOCKING TAB
A
B

Fig.M8

2-9. Replacement of Take-up and Supply Brake Arm Unit.

1. Unlock the locking tab (A) to direction of arrow mark and lift up the Supply Brake Arm Unit.
2. Unlock the locking tab (B) and lift up the Take-up Brake Arm Unit.
3. Both Brake Arm Units can be reinstalled by reversing the removal procedure.
   However the boss (C) of the Supply Brake Arm Unit insert to hole (E) of mechanical chassis while pushing the Main Lever to direction of arrow mark as shown in Fig.M9. (expanded view)

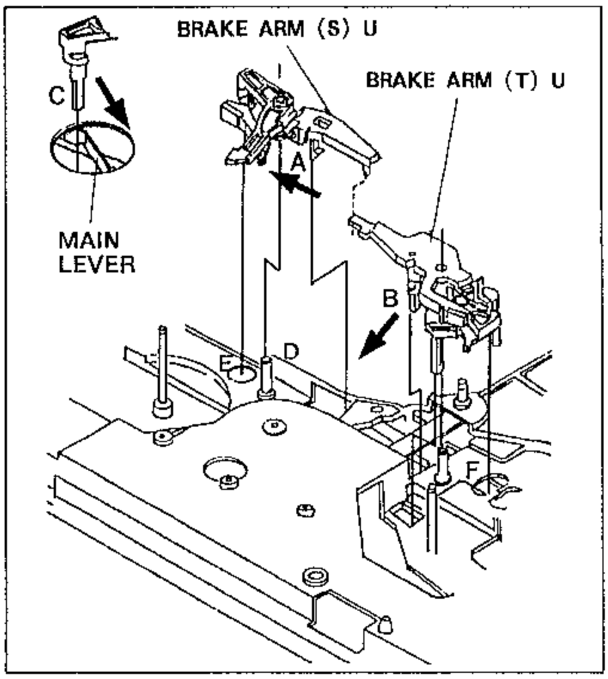

BRAKE ARM (S) U
BRAKE ARM (T) U
C
MAIN LEVER
A
B
D
E
F

Fig.M9

2-10. Replacement of Tension Band Unit

1. Remove the cut washer (H) and lift up the Tension Arm Unit with the Tension Band and spring from the Tension Spring Arm.
2. Unlock the locking tab (A) to direction of arrow mark and remove the Tension Band from the Arm Unit.
3. Unlock the locking tab (B) and remove the Tension Band from the Tension Arm Unit.
4. The Tension Band Unit can be reinstalled by reversing the removal procedure.

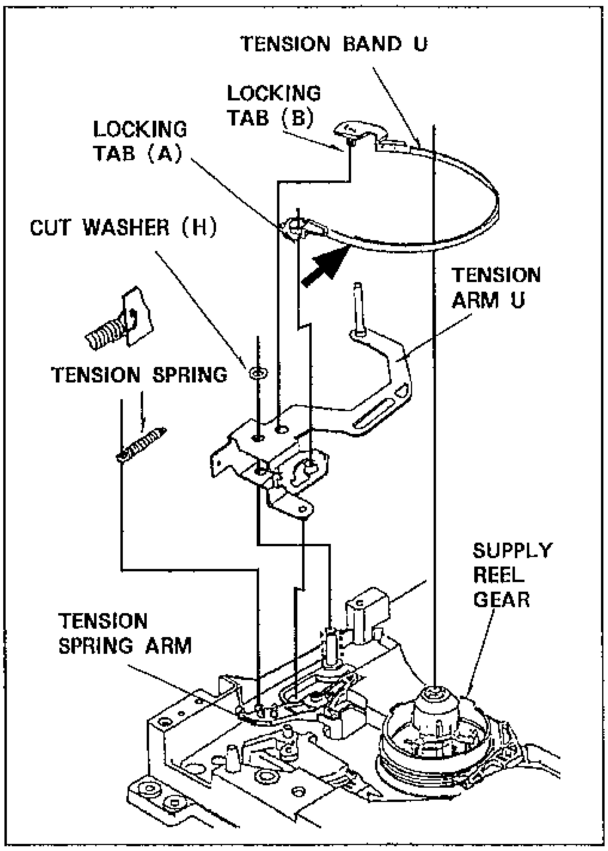

TENSION BAND U
LOCKING TAB (B)
LOCKING TAB (A)
CUT WASHER (H)
TENSION ARM U
TENSION SPRING
SUPPLY REEL GEAR
TENSION SPRING ARM

Fig.M10

2-11. Replacement of Loading Motor Unit

1. Unscrew screw (I).
2. Unlock the locking tab (A) from the top of the mechanical chassis.
3. Lift up the Loading Motor Bracket and push it to direction of arrow mark as shown in Fig.M11.
4. When reinstall the Loading Motor Unit, insert the locking hole (B') of Loading Motor Bracket Unit to shaft (B) on the mechanical chassis. Also a hole (C) of the loading Motor Unit must be matched to the shaft (C') as shown in Fig.M11.

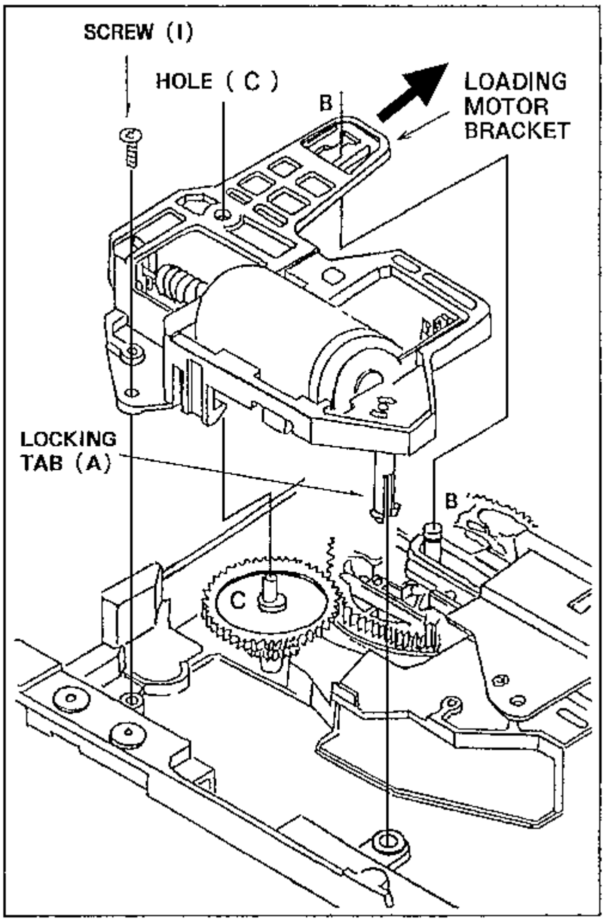

SCREW (I)
HOLE (C)
B
LOADING MOTOR BRACKET
LOCKING TAB (A)
B'
C

Fig.M11

2-12. Replacement of Cleaner Roller Unit

1. Unlock the locking tab (A) as shown in Fig.M12. and lift it up.
2. The Cleaner Roller Unit can be reinstalled by reversing the removal procedure.

3. Replacement of the Cleaner Rubber Unit. Hold the Cleaner Roller Unit and unlock the locking tab (B) then lift it up.

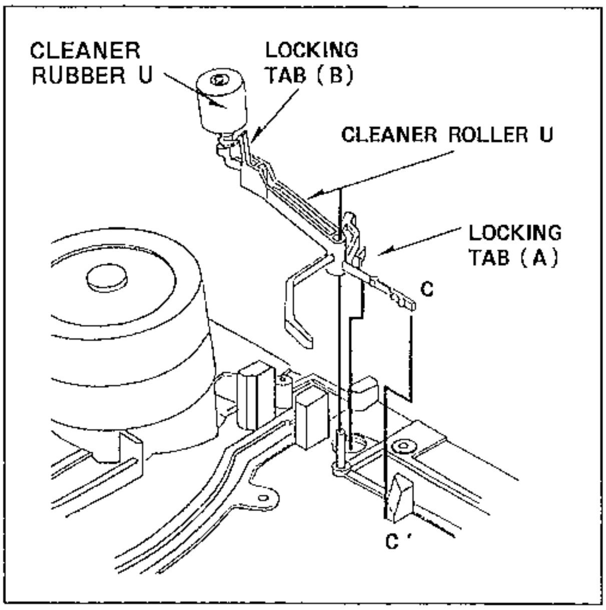

CLEANER RUBBER U
LOCKING TAB (B)
CLEANER ROLLER U
LOCKING TAB (A)
C
C'

Fig.M12

2-13. Replacement of SS Brake Base Unit and Timing Belt

1. Remove the Timing Belt.
2. Unscrew (J) and (K) then remove SS Brake Base Unit.
3. SS Brake Unit and Timing Belt can be reinstalled by reversing the removal procedure.

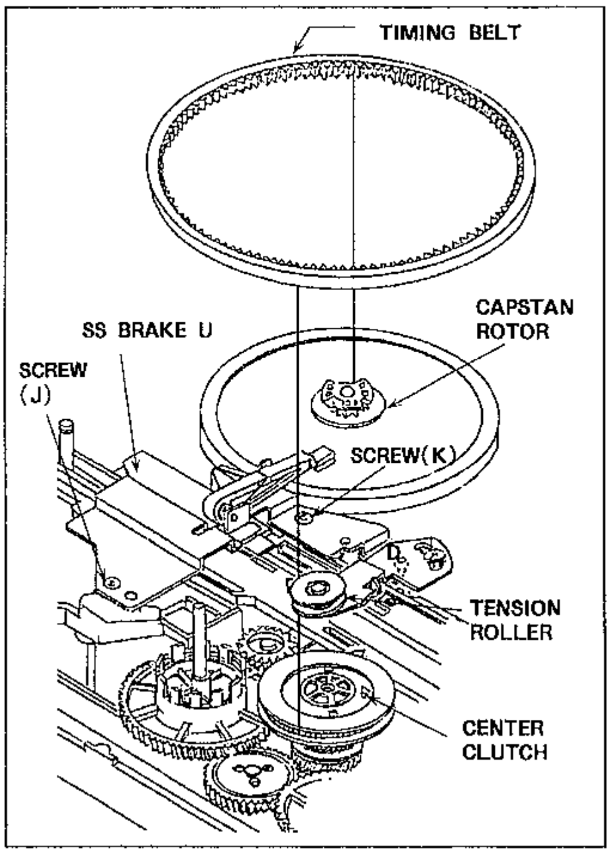

TIMING BELT
SS BRAKE U
CAPSTAN ROTOR
SCREW (J)
SCREW(K)
TENSION ROLLER
CENTER CLUTCH

Fig.M13

2-14. Replacement of Supply & Take-up Inclined Base Unit

1. Remove SS Brake Unit, Main Lever Unit and Supply and Take-up Loading Arm Unit refer to SECTION 2. and 3. in this service manual.
2. Remove the Inclined Holder base (A) from back side of mechanism chassis.
3. Remove the Supply and Take-up Inclined Base Units.
4. The both Inclined Base Units can be reinstalled by reversing the removal procedure.

<NOTE>

After reinstall the Inclined Base Unit should be perform Mechanical adjustment.

3-2. FINE ADJUSTMENT of P2 and P3 POSTS
3-5. FINE ADJUSTMENT of A/C HEAD HEIGHT
3-6. HORIZONTAL POSITION ADJUSTMENT of A/C HEAD

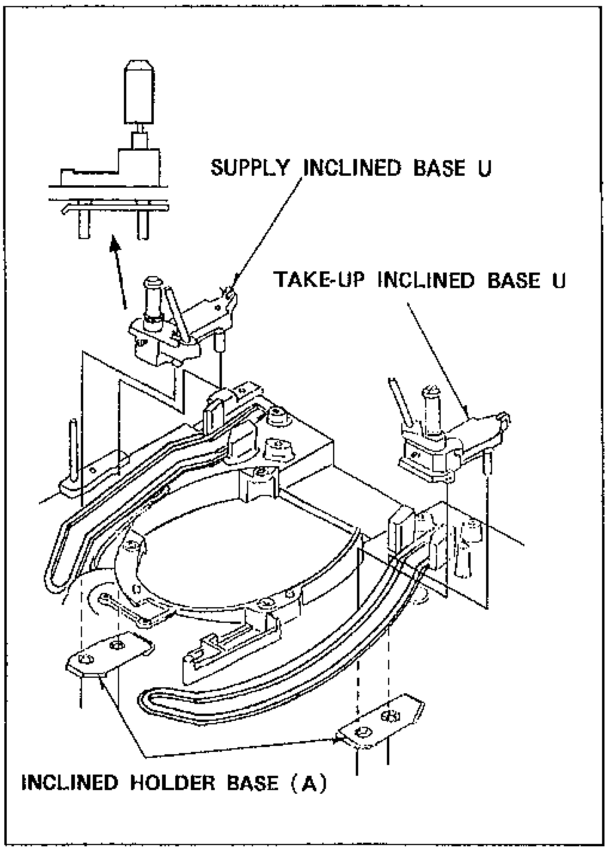

SUPPLY INCLINED BASE U
TAKE-UP INCLINED BASE U
INCLINED HOLDER BASE (A)

Fig.M14

SECTION 3
MECHANICAL ADJUSTMENT PROCEDURE

3-1. Coarse Adjustment of Tape Guide Post Height

1. Remove the Top Plate and Cassette Holder.
2. Turn the Loading Motor until the unloading completes.
3. Loosen the fixing screw of P2 and P3 Posts.
4. Rotate the P2 and P3 Posts clockwise to the end.
5. Rotate the P2 and P3 Posts twice counter-clockwise as shown in Fig.M15.
6. Install the Cassette Holder and Top Plate.
7. Playback the normal tape and make sure that the edge of not curing at the bottom or top end of the P1,P2,P3 and P4 Posts as shown in Fig.M17.

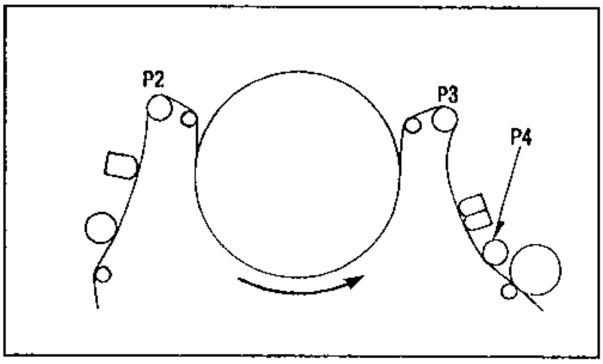


Fig.M16

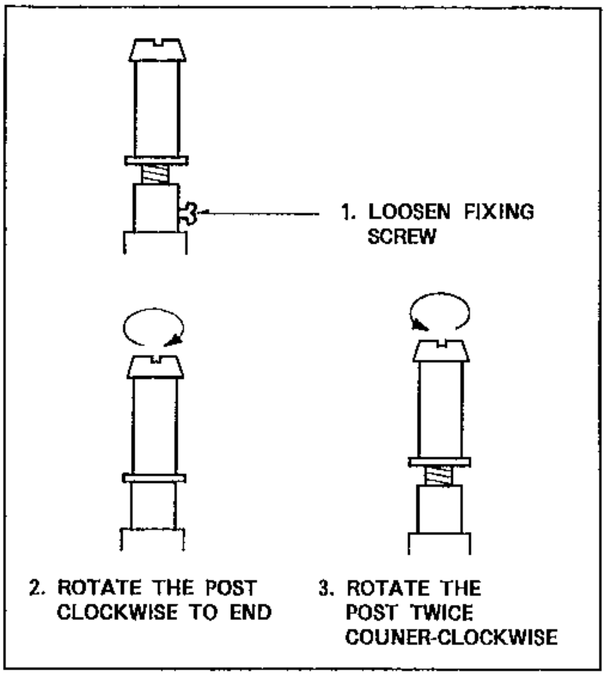

1. LOOSEN FIXING SCREW
2. ROTATE THE POST CLOCKWISE TO END
3. ROTATE THE POST TWICE COUNER-CLOCKWISE

Fig.M15

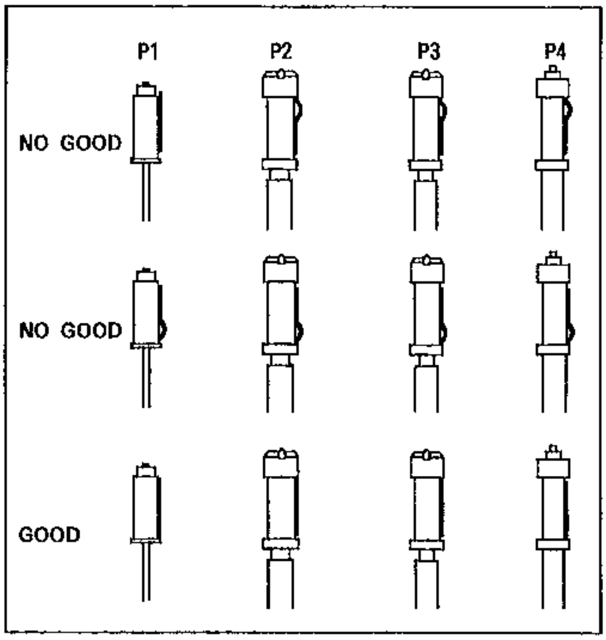

P1
P2
P3
P4
NO GOOD
NO GOOD
GOOD

Fig.M17

3-2. Fine Adjustment of P2 and P3 Posts

1. Connect the oscilloscope to the Test Point of the HEAD AMP (Video RF Envelope) and the head switching pulse as a triggering signal.

<NOTE>
TEST POINT please refer to the MECHANICAL ADJUSTMENT INFORMATION which are shown in service manual for each model.

2. Playback the 2nd portion of the alignment tape.
3. Press the tracking control button on the Front panel and adjust for maximum Video RF envelope.
4. If the RF envelope appears like example "A" or "B" in Fig.M18 then adjustment of the tape guide post (P3:Exit) is necessary.
5. Adjust the P3 post with the post adjustment screwdriver so that the RF envelope waveform at the exit portion becomes flat as shown in Fig.M18.
6. If the RF envelope appears like example "C" or "D" in Fig.M18 then adjustment of the tape guide post (P2:Entrance) is necessary.
7. Adjust the P2 post with the post adjustment screwdriver so that the RF envelope waveform at the entrance portion becomes flat as shown in Fig.M18.

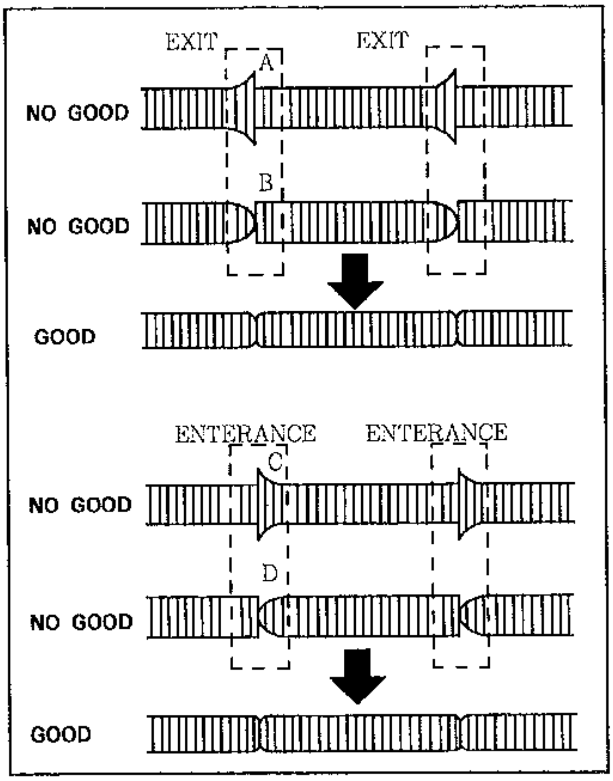

EXIT
EXIT
A
NO GOOD
B
NO GOOD
GOOD
ENTERANCE
ENTERANCE
C
NO GOOD
D
NO GOOD
GOOD

Fig.M18

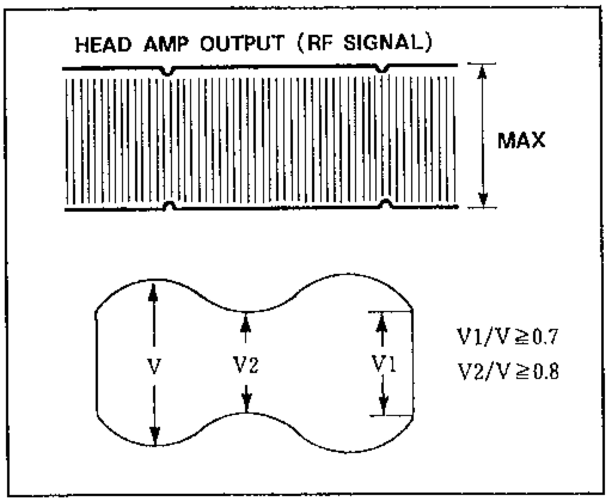

HEAD AMP OUTPUT (RF SIGNAL)
MAX
V
V2
V1
V1/V≧0.7
V2/V≧0.8

Fig.M19

3-3. Coarse Adjustment of A/C Head Height (1)

<NOTE>
This procedure should be performed only when the A/C Head is replaced.

1. Playback the normal tape.
2. Turn the 3 screws (A)(B)(C) mutually so that lower edge of tape running at lower edge of A/C Head and confirm a space as much as possible to flat between the A/C Head Unit and the A/C Head Base.

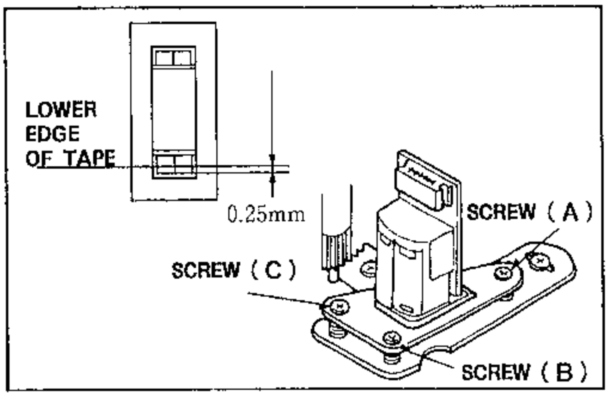

LOWER
EDGE
OF TAPE
0.25mm
SCREW (A)
SCREW (C)
SCREW (B)

Fig.M20

3-4. Coarse Adjustment of A/C Head Height (2)

1. Playback the normal tape.
2. Rotate the screw (A) as shown in Fig.M20 until the wrinkle appears on the lower edge of tape at P4 Post.
3. Rotate the screw (B) until the wrinkle just disappear on the lower edge of tape at P4 Post.

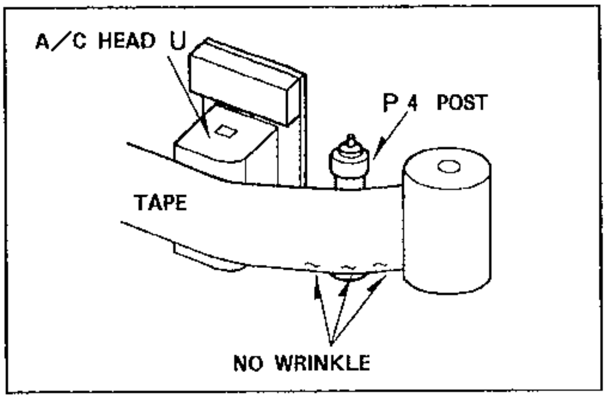


Fig.M21

3-5. Fine Adjustment of A/C Head Height

1. Connect the oscilloscope to the Audio output.
2. Playback the 2nd portion of the alignment tape.
3. Rotate the screw (C) so that audio signal becomes maximum.

<When moving the A/C Head up>

1. Rotate the screw (A) counter-clockwise until the wrinkle appears on the lower edge of tape at P4 Post.
2. Rotate the screw (B) counter-clockwise until just disappears on the lower edge of tape at P4 Post.
3. Rotate the screw (C) counter-clockwise until the audio signal is maximized.

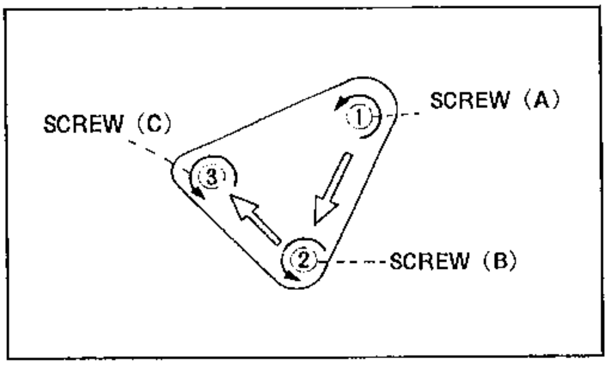


Fig.M22

<When moving the A/C Head down>

1. Rotate the screw (B) clockwise until the wrinkle appears on the lower edge of tape at P4 Post.
2. Rotate the screw (A) clockwise until the wrinkle just disappear on the lower edge of tape at P4 Post.
3. Rotate the screw (C) clockwise until the audio signal is maximized.

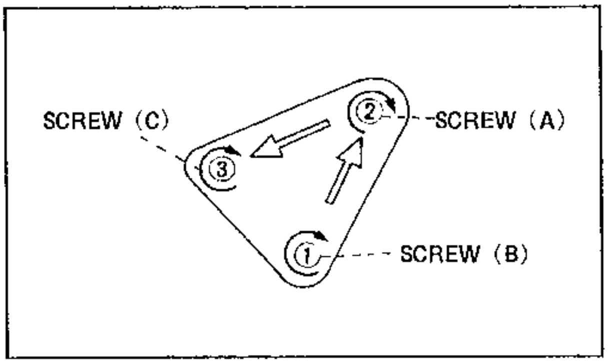


Fig.M23

3-6. Horizontal Position Adjustment of A/C Head.

<NOTE>
TEST POINT and JUMPER WIRE position, please refer to the MECHANICAL ADJUSTMENT INFORMATION which are shown in service manual for each model.

1. Set the tracking control into the center fix position by connect a jumper wire on the MAIN C.B.A.
2. Connect the oscilloscope to the Audio output, Video RF envelope on the Head Amp test point and head switching pulse on the Head Amp test point as for triggering.
3. Playback the 4th portion of the alignment tape.
4. Loosen the 2 screws (D)(E).
5. Adjust the A/C Head Base (F) so that the phase of audio drop-out and RF video drop-out becomes the same as possible. Fig.M24.
6. Playback the 2nd portion of the alignment tape.
7. Adjust the A/C Head Base (F) until the video RF signal is maximized.
8. Carefully tighten screw (D) with hold the A/C Head Base position with the Fine Adjustment Gear Driver then tighten screw (E).

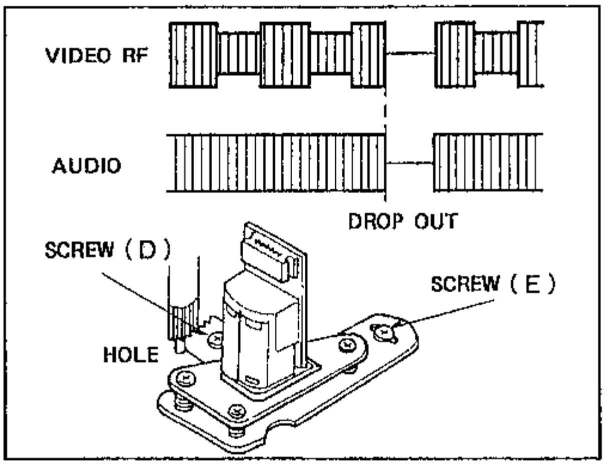

VIDEO RF
AUDIO
DROP OUT
SCREW (D)
SCREW (E)
HOLE

Fig.M24

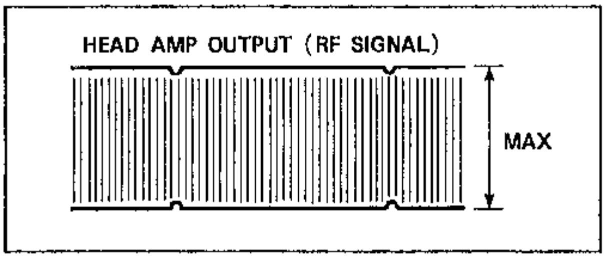

HEAD AMP OUTPUT (RF SIGNAL)
MAX

Fig.M25

3-7. Adjustment of Tension Post Position

1. Remove the Top Plate and Cassette Holder.
2. Turn the Loading Motor until the loading completes.
3. Adjust the hole of the Tension Band Unit by Hex wrench so that the left edge of the Impedance Roller and Tension Arm Unit as shown in Fig.M26.

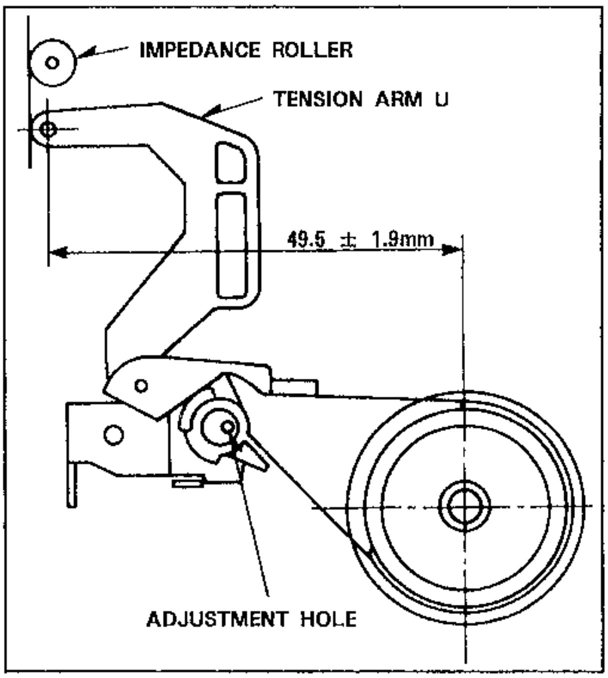

IMPEDANCE ROLLER
TENSION ARM U
49.5 ± 1.9mm
ADJUSTMENT HOLE

Fig.M26

3-8. Adjustment of Back Tension

1. Playback the cassette tape from the begging of tape and wait until tape movement has stabilized.
2. Insert the back tension meter into the path of the tape and confirm the back tension to be within specification as shown in Fig.M27.
3. If back tension is not in the specification, change the spring notch as shown in Fig.M28.

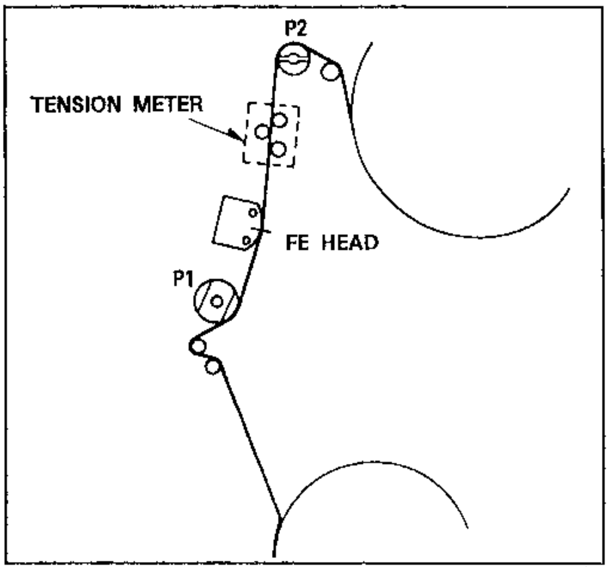

P2
TENSION METER
FE HEAD
P1

Fig.M27

<NOTE>
Specification of Back Tension, please refer to the MECHANICAL ADJUSTMENT INFORMATION which are shown in service manual for each model.

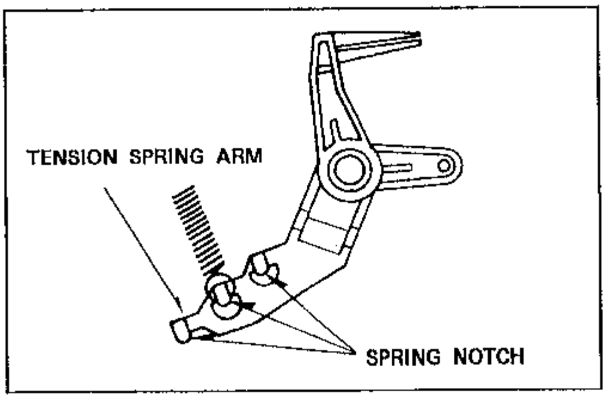

TENSION SPRING ARM
SPRING NOTCH

Fig.M28

3-9. Adjustment of Capstan Housing & Stator.

1. Install the Capstan Housing into the mechanical chassis and place the Capstan Stator into position.
2. Loosely tighten 3 screws (G).
3. Insert the Center Fixing Tool (VFK0851) as shown in Fig.M29.
4. Tighten 3 screws (G).
5. Remove the Center Fixing Tool.

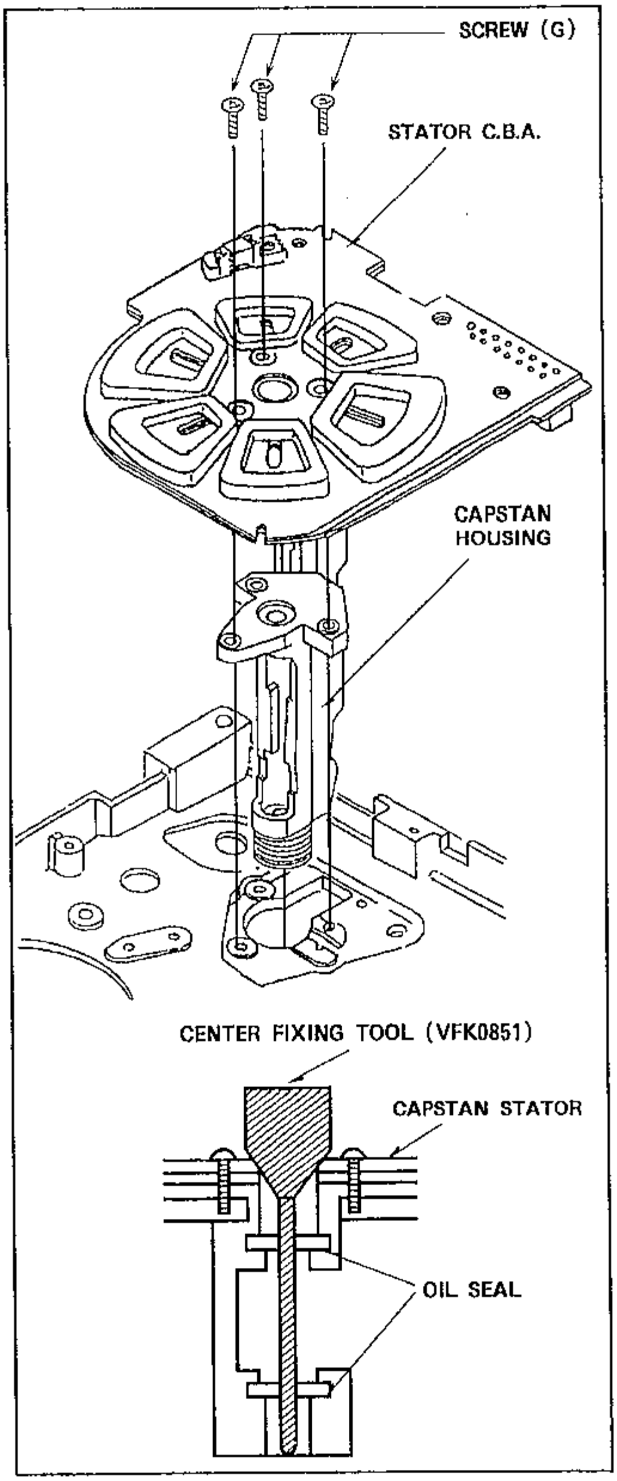

SCREW (G)
STATOR C.B.A.
CAPSTAN HOUSING
CENTER FIXING TOOL (VFK0851)
CAPSTAN STATOR
OIL SEAL

Fig.M29

3-10. Adjustment of Thrust Gap

1. Turn the Thrust Adjustment Screw clockwise to until the Capstan Rotor just separate from the Capstan Stator while rotating the Capstan Rotor by hand.
2. Turn the Thrust Adjustment Screw clockwise to 180 degrees from point at step 1.
3. Set the 2 Oil Seal to edge of the Capstan Housing as show in Fig.M30.

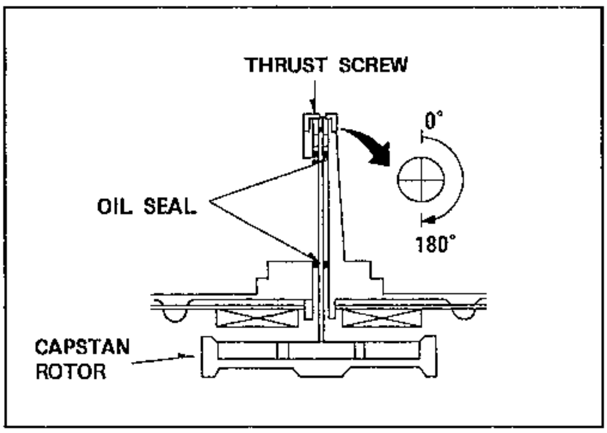


Fig.M30

3-11. Adjustment of FG GAP

1. Loosen screw (H) and set the Fine Adjustment Screw Driver in the hole on the Capstan Stator Unit.
2. Adjust the gap between FG Head and the Capstan Rotor.
3. After adjustment, tighten a screw (H).

<NOTE>
Specification of FG GAP, please refer to the MECHANICAL ADJUSTMENT INFORMATION which are shown in service manual for each model.

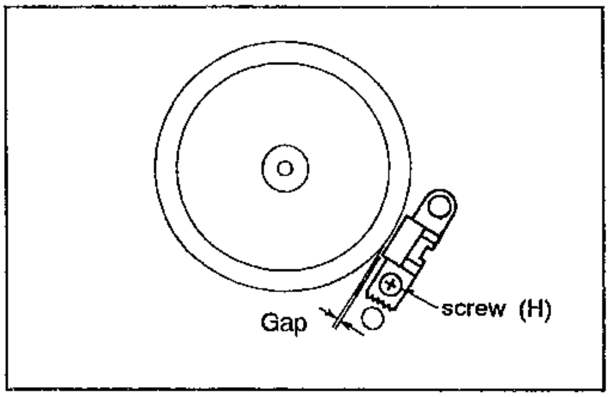


Fig.M31

3-12. Pressing Force Confirmation of the Pressure Roller

1. Playback the end portion of the 120 minutes tape.
2. Set the Fan type tension gauge to point (A) and push to direction indicated by the arrow (B) as shown in Fig.M32.
3. Confirm that reading of tension gauge is in specification at momentary stop the tape running.

<Note>
Specification of PRESSING FORCE, please refer to the MECHANICAL ADJUSTMENT INFORMATION which are shown in service manual for each model.

If the pressing force is not in specification, change the pressure spring.

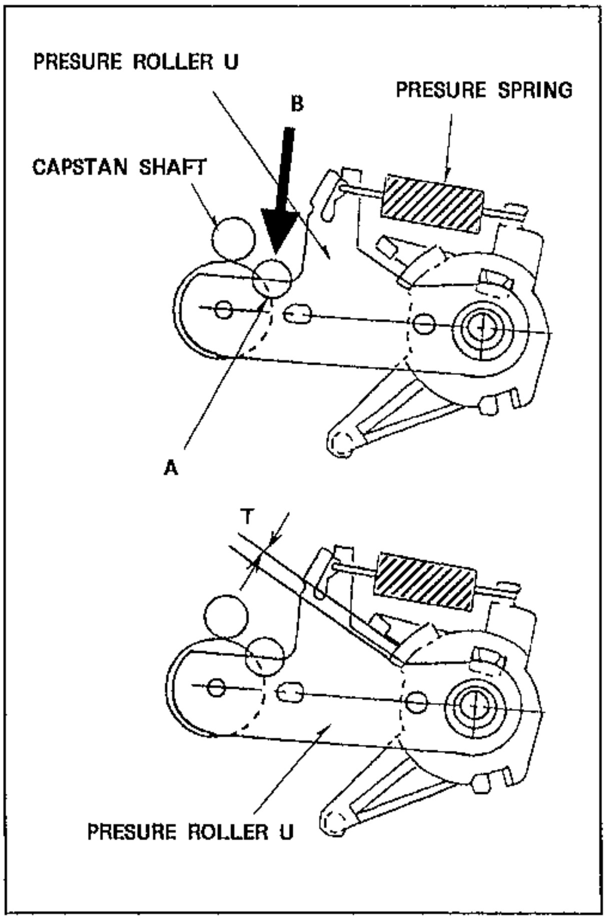


Fig.M32

SECTION 4
ASSEMBLY & PHASE ADJUSTMENT PROCEDURE

4-1. Assembly Procedures of Mechanism

The gear phase alignment is performed in the cassette down position and is crucial for the K-Mechanism to operate correctly.

1. Top view of gear phase alignment marks.
   There are alignment marks on the pinch cam gear and sub cam gear. there is one alignment mark on the carriage gear.

2. Bottom view of gear phase alignment marks.
   There are alignment marks on take-up loading gear and supply loading gear. There is an additional mark on the take-up loading gear that aligns with the mark on the main lever. There are alignment marks on the main cam gear and the sub cam gear. The mode switch gear mark aligns with a notch in the mode switch frame.

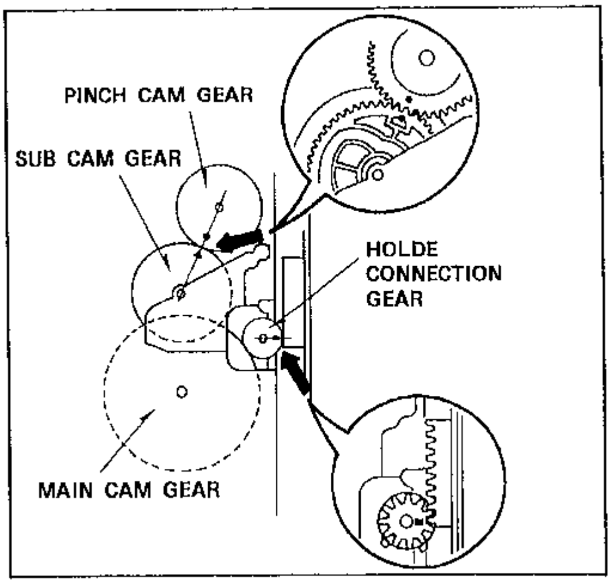
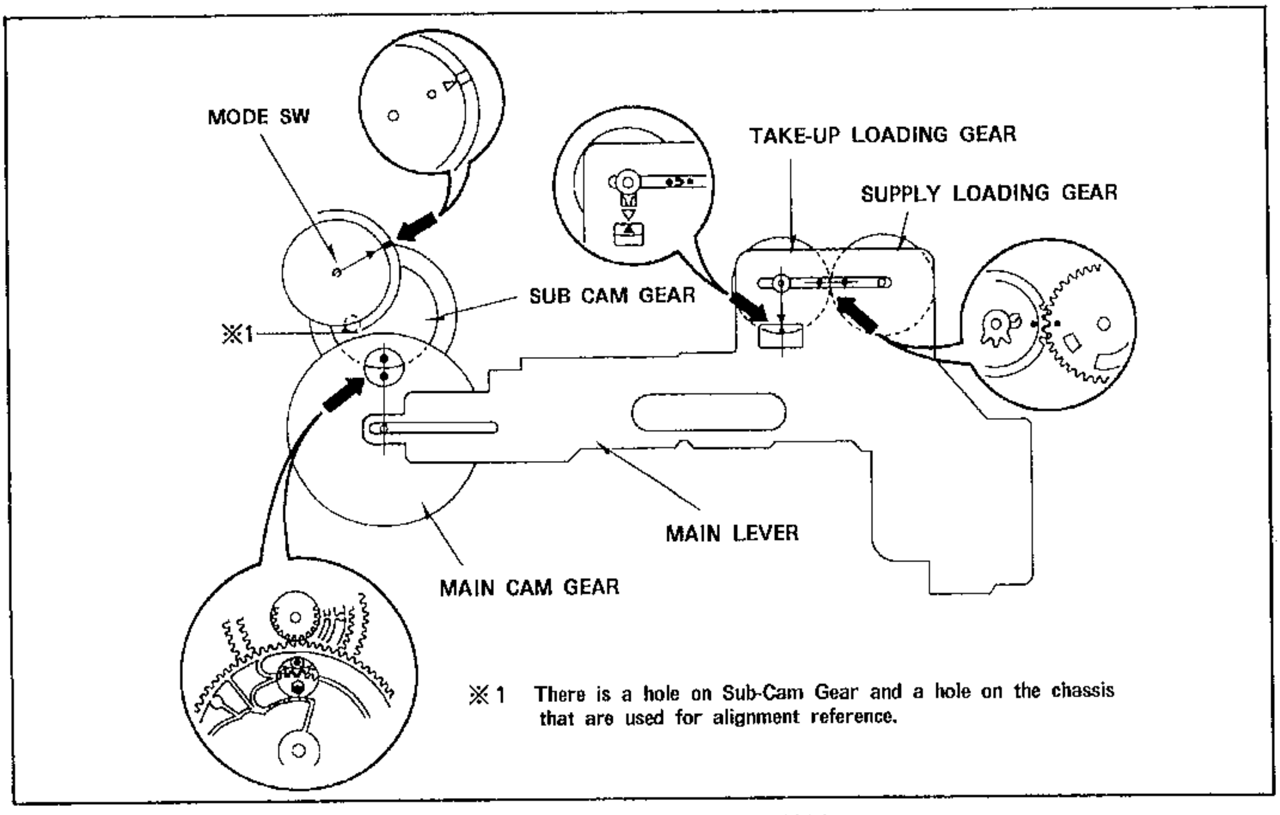

PINCH CAM GEAR
SUB CAM GEAR
HOLDE CONNECTION GEAR
MAIN CAM GEAR

Fig.M33


MODE SW
TAKE-UP LOADING GEAR
SUPPLY LOADING GEAR
SUB CAM GEAR
※1
MAIN LEVER
MAIN CAM GEAR

※1 There is a hole on Sub-Cam Gear and a hole on the chassis that are used for alignment reference.

Fig.M34

4-2. Assembly of parts on the Top Chassis

1. Install the Pinch Cam Gear onto shaft (A) and the P5 Arm Unit onto shaft (B).
2. Install the P5 Stopper Base with the cut washer (D) and screw (C).
3. Install the P5 Stopper on the P5 Stopper Base with latch (E).

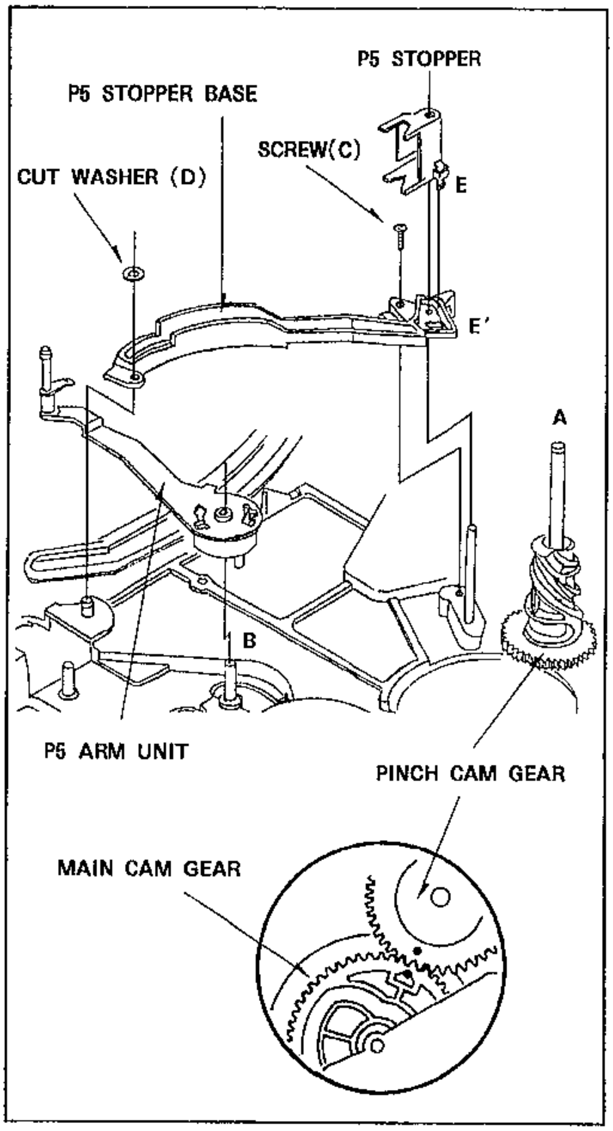

P5 STOPPER
P5 STOPPER BASE
SCREW(C)
CUT WASHER (D)
E
E'
A
B
P5 ARM UNIT
PINCH CAM GEAR
MAIN CAM GEAR

Fig.M35

4-3. Assembly of parts on the Bottom Chassis

1. Install the Idler Arm Unit onto shaft (F).
2. Install the Take-up and Supply Reel Gears onto shaft (G) and (H).
3. Install the Idler Regulator Level onto shaft (I) then install the Direct Lever.
4. Install the Center Clutch onto shaft (F) with the cut washer.

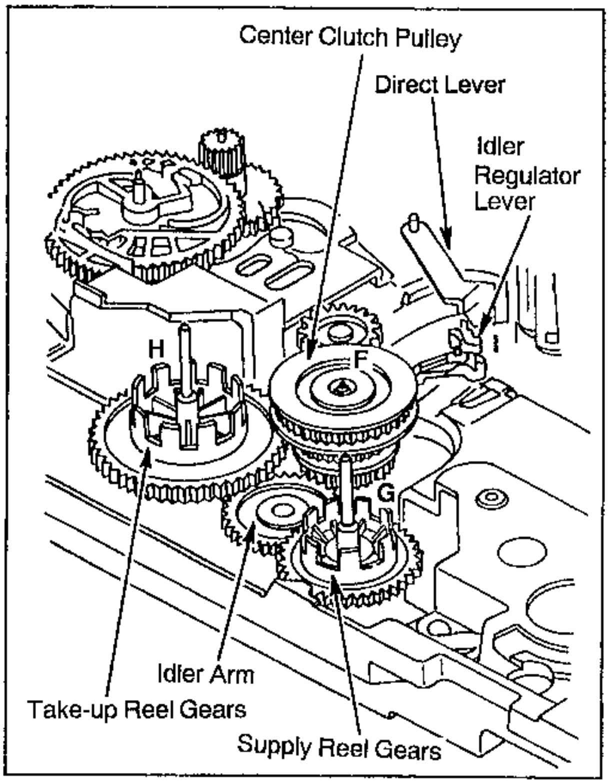

Center Clutch Pulley
Direct Lever
Idler Regulator Lever
H
F
I
G
Idler Arm
Take-up Reel Gears
Supply Reel Gears

Fig.M36

4-4. Assembly of Main Cam Gear and Sub Cam Gear

1. Install the Sub Cam Gear on to shaft (J) so that the chassis hole aligns with hole in the Sub Cam Gear.
2. Rotate the Holder Connection Gear to position of arrow mark as shown in Fig.M37.
3. Install the Main Cam Gear onto shaft (K) so that the hole of the Main Cam Gear aligns with the hole in the Sub Cam Gear. Also insert the boss of the Take-up Tension Regulator Arm into the slot on the Main Cam Gear.

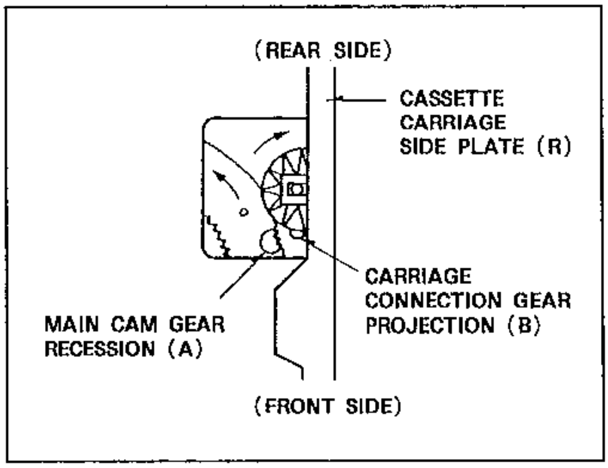

(REAR SIDE)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(FRONT SIDE)

Fig.M37

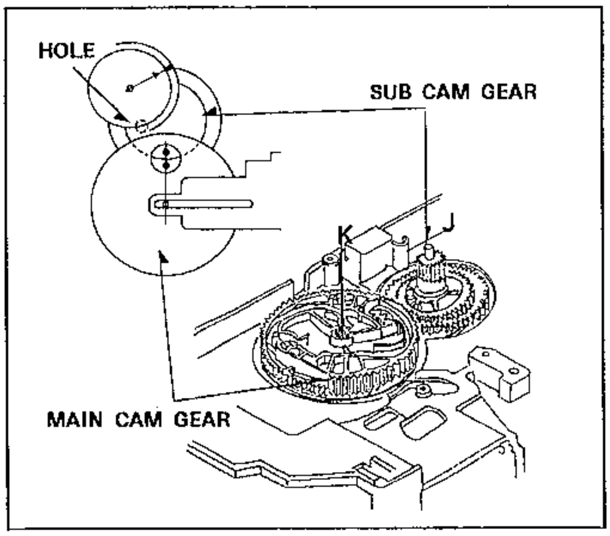

HOLE
SUB CAM GEAR
K
J
MAIN CAM GEAR

Fig.M38

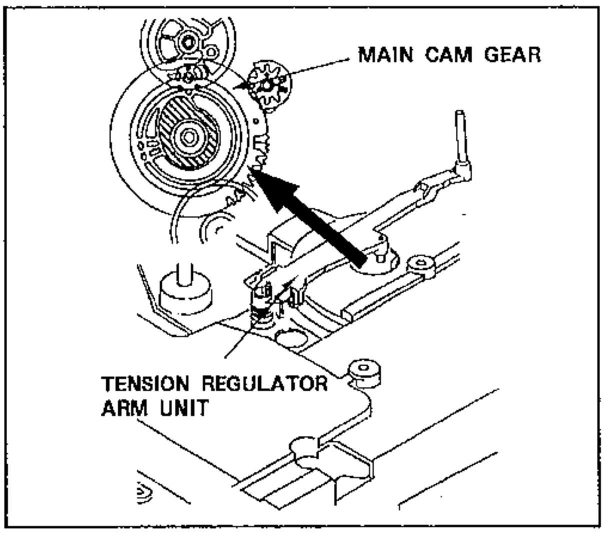

MAIN CAM GEAR
TENSION REGULATOR ARM UNIT

Fig.M39

4-5. Assembly of Mode Switch

1. Align a triangle mark on the Mode Switch Gear with the notch on the Mode Switch frame.
2. Confirm the Main and Sub Cam Gears aligned properly then install the Mode Switch with screw (L).

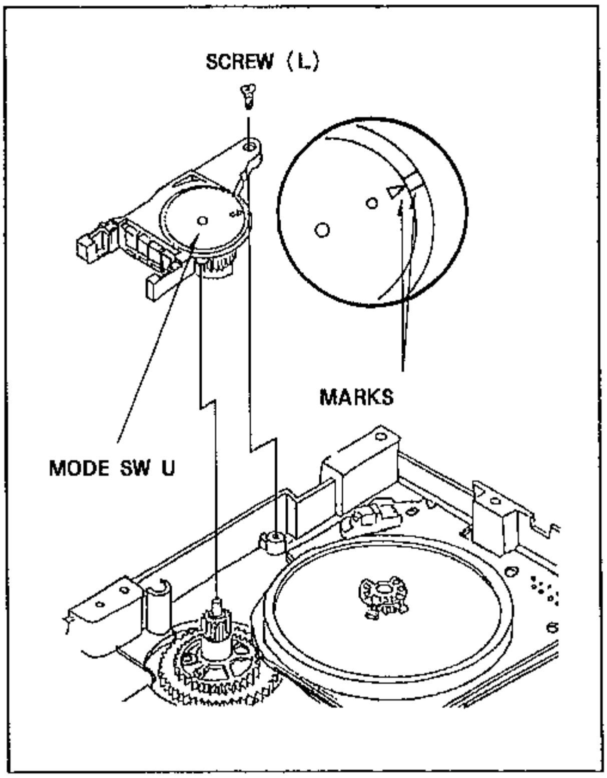

SCREW (L)
MARKS
MODE SW U

Fig.M40

4-6. Assembly of Take-up and Supply Loading Gears.

1. Install the Supply Loading Gear onto the shaft (S).
2. Install the Take-up Loading Gear onto the shaft (T) so that hole on the Take-up Loading Gear align with the hole on the Supply Loading Gear.
3. Install the Supply Loading Arm onto shaft of the Supply Inclined Base with washer.
4. Insert the Take-up Loading Arm onto shaft of the Take-up Inclined Base with washer.

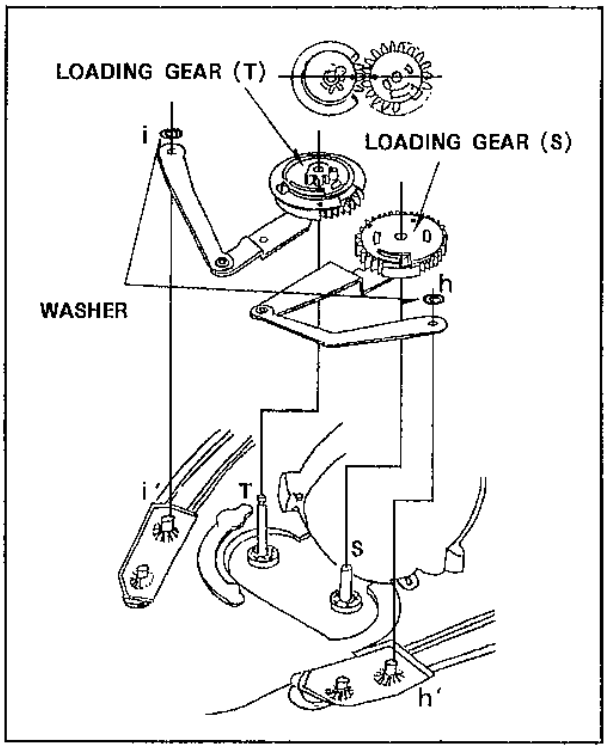

LOADING GEAR (T)
LOADING GEAR (S)
i
WASHER
h
i'
T
S
h'

Fig.M41

4-7. Assembly of Main Lever

1. Install the Main Lever Arm checking that the boss of arms and shafts are in correct position and mark on the Main Lever Arm is aligned with mark on the Take-up Loading Gear.
2. Insert the 2 cut washer as shown in Fig.M42.

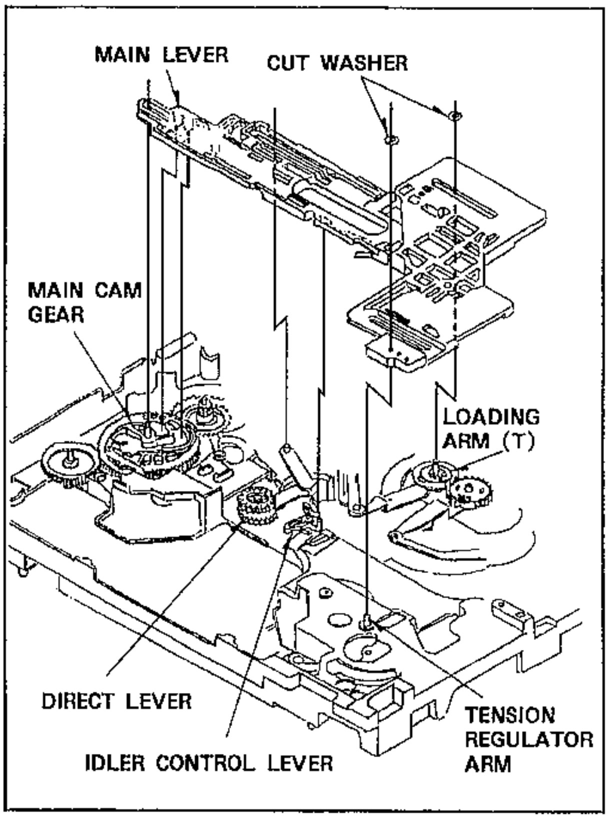

MAIN LEVER
CUT WASHER
MAIN CAM GEAR
LOADING ARM (T)
DIRECT LEVER
IDLER CONTROL LEVER
TENSION REGULATOR ARM

Fig.M42

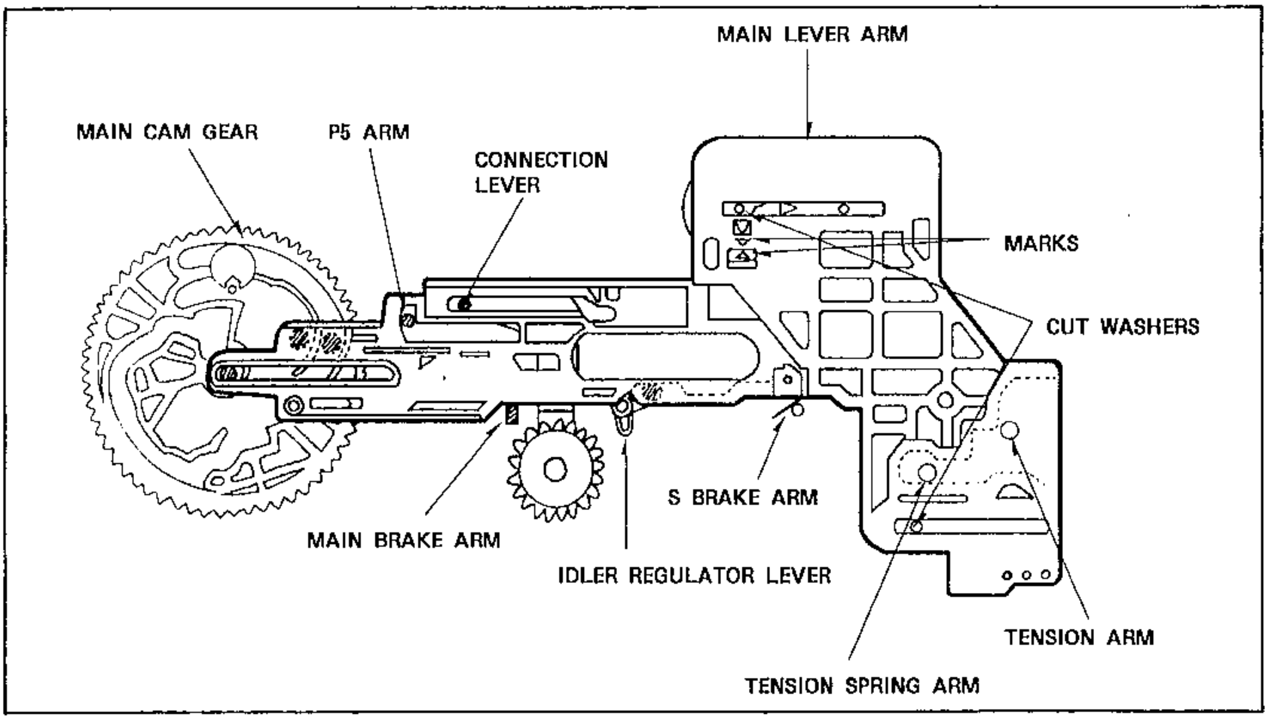

MAIN LEVER ARM
MAIN CAM GEAR
P5 ARM
CONNECTION LEVER
MARKS
CUT WASHERS
S BRAKE ARM
MAIN BRAKE ARM
IDLER REGULATOR LEVER
TENSION ARM
TENSION SPRING ARM

Fig.M43

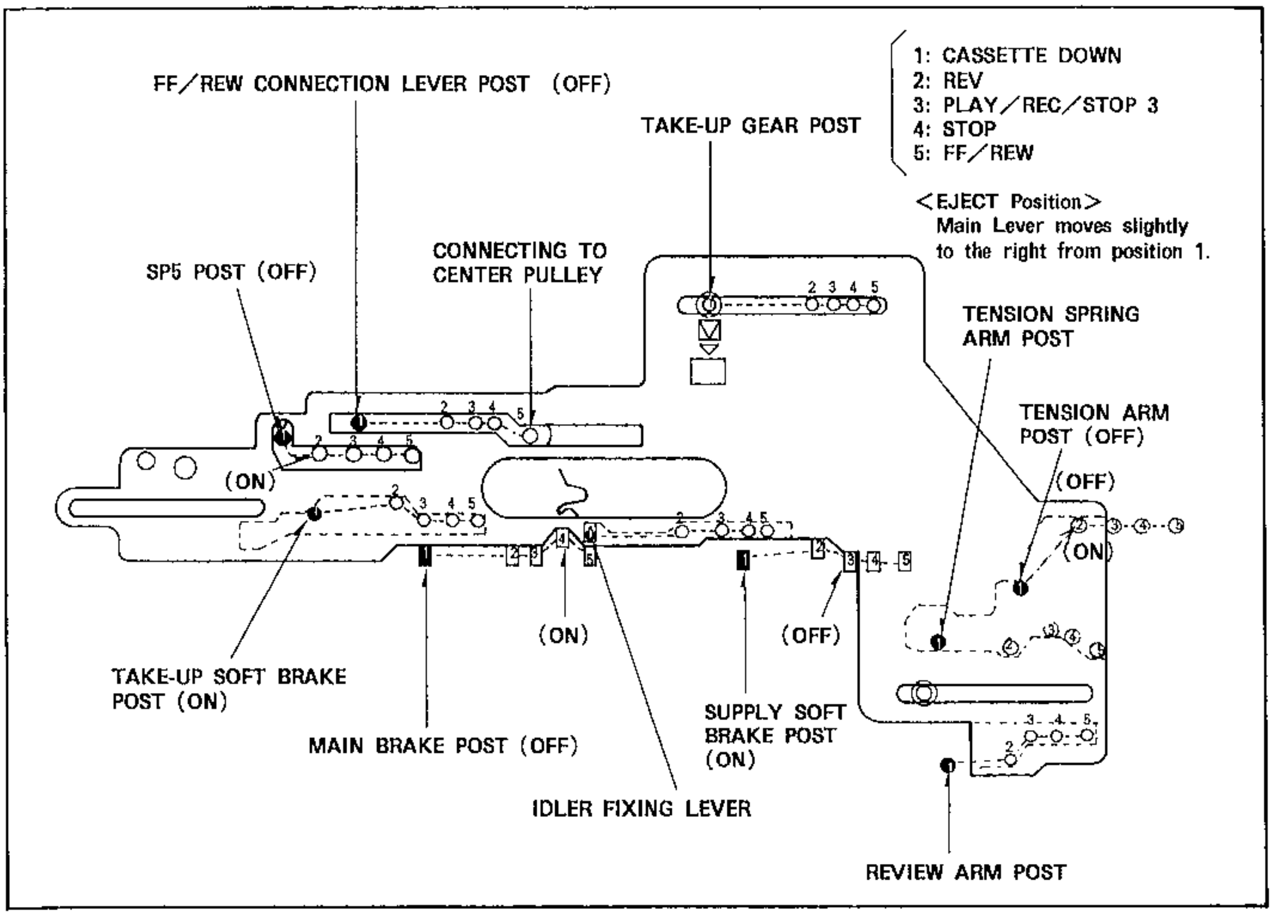

1: CASSETTE DOWN
2: REV
3: PLAY／REC／STOP 3
4: STOP
5: FF／REW
<EJECT Position>
Main Lever moves slightly to the right from position 1.
FF／REW CONNECTION LEVER POST (OFF)
TAKE-UP GEAR POST
SP5 POST (OFF)
CONNECTING TO CENTER PULLEY
TENSION SPRING ARM POST
TENSION ARM POST (OFF)
(ON)
(OFF)
(ON)
(ON)
(OFF)
TAKE-UP SOFT BRAKE POST (ON)
MAIN BRAKE POST (OFF)
SUPPLY SOFT BRAKE POST (ON)
IDLER FIXING LEVER
REVIEW ARM POST
2
3
4
5

Fig.M44

4-8. Reinstall of the Cassette Compartment

1. Push the locking tabs to direction as shown in Fig.M45 and remove the Top Plate.

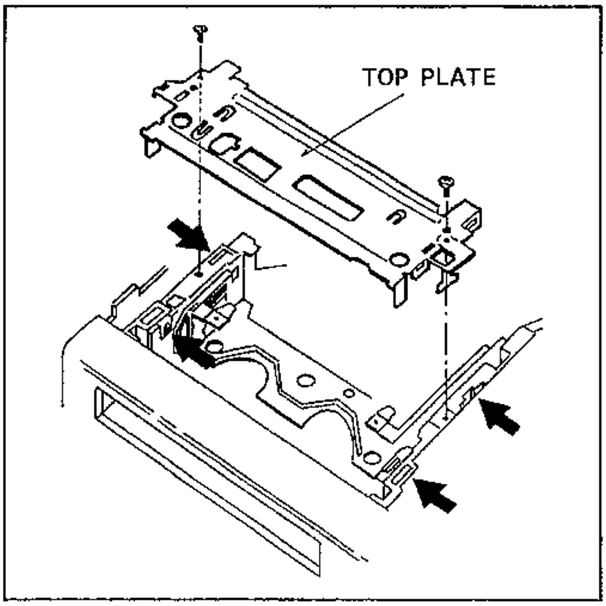


Fig.M45

2. Lift up the Cassette Holder Unit as shown in Fig.M46.

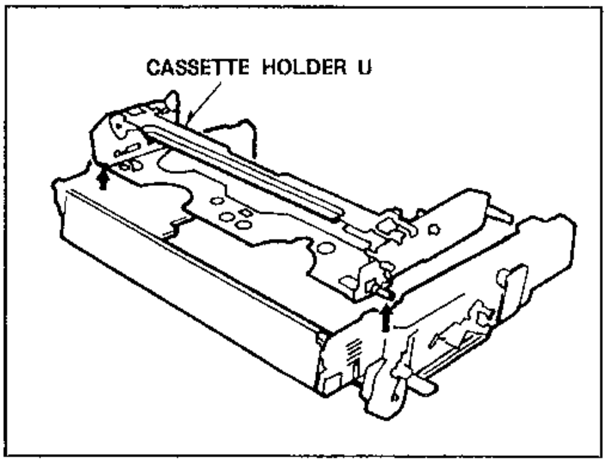

CASSETTE HOLDER U

Fig.M46

3. Press the Wiper Arm to direction indicated by arrow mark so that the Wiper Arm comes to cassette down position completely as shown in Fig.M48. Confirm a triangle mark on the Wiper Arm aligns with the mark on the Rack (B) Unit.

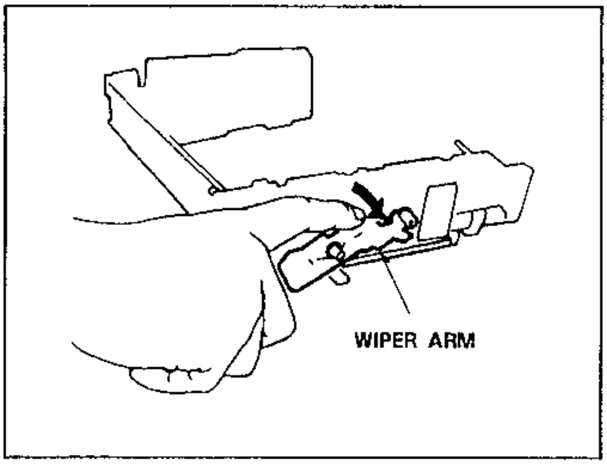


Fig.M47

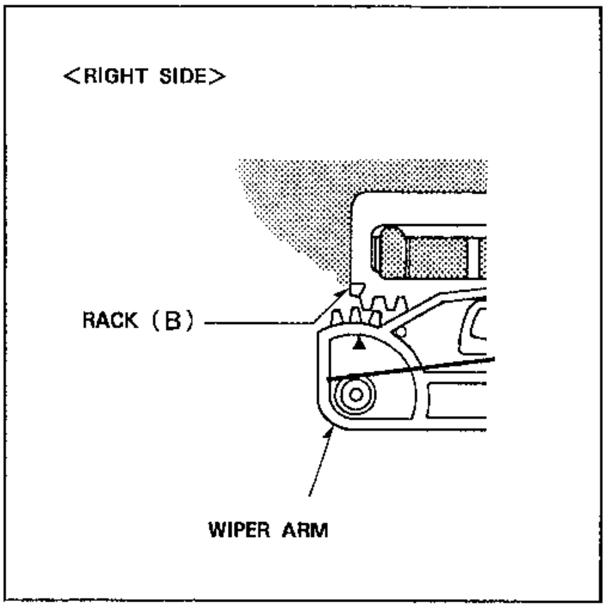

<RIGHT SIDE>
RACK (B)
WIPER ARM

Fig.M48

4. Install the cassette compartment (without cassette holder) to the mechanical chassis so that mark on the Holder Connection Gear should line up with first tooth of the Rack Gear as shown in Fig.M49.

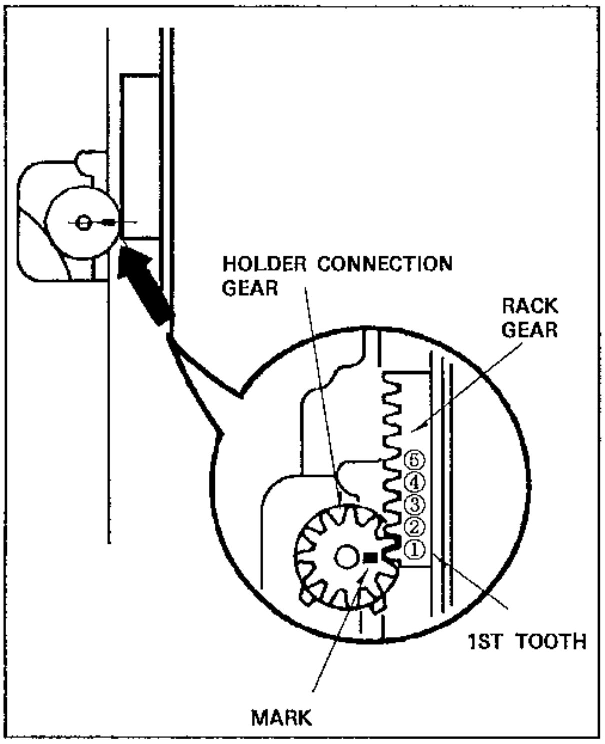

HOLDER CONNECTION GEAR
RACK GEAR
⑤
④
③
②
①
1ST TOOTH
MARK

Fig.M49

5. Tighten 4 screws as shown in Fig.M50.
6. Manually move the loading mechanism toward the EJECT position by turn the Loading Motor and stop just before completion, so that the Wiper Arm straight up.
7. Install the Cassette Holder Unit in the Cassette Compartment Base as shown in Fig.M51.
8. Install the Top Plate on the Cassette Compartment Base.
9. Manually confirm that front loading and main loading run smoothly.

<NOTE>

For proper front loading, the guide pin on the opener lever should follow the upper track of the right side panel as shown in Fig.M52.

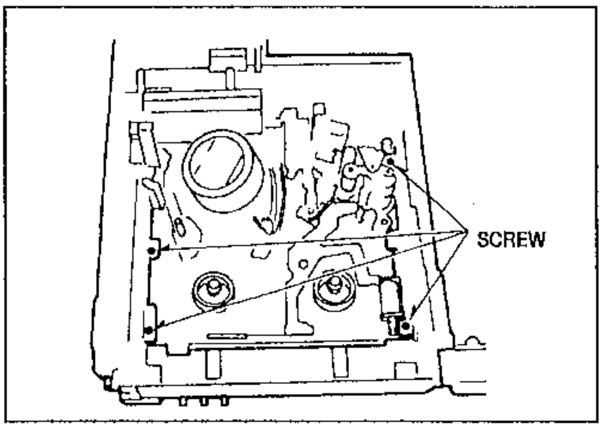


Fig.M50

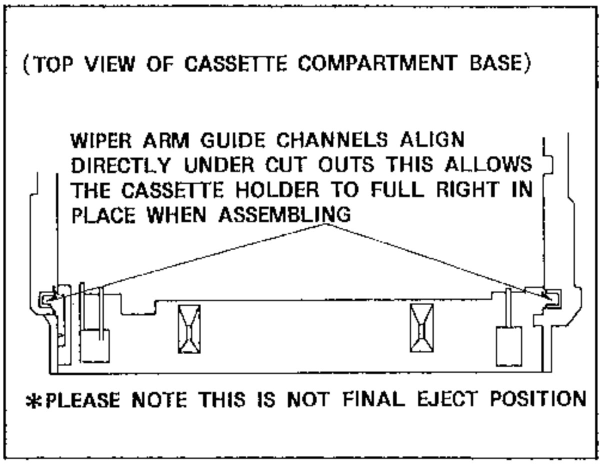

(TOP VIEW OF CASSETTE COMPARTMENT BASE)
WIPER ARM GUIDE CHANNELS ALIGN DIRECTLY UNDER CUT OUTS THIS ALLOWS THE CASSETTE HOLDER TO FULL RIGHT IN PLACE WHEN ASSEMBLING
*PLEASE NOTE THIS IS NOT FINAL EJECT POSITION

Fig.M51

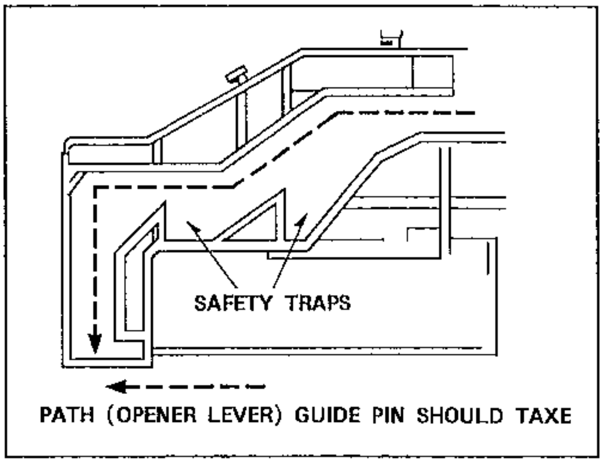

SAFETY TRAPS
PATH (OPENER LEVER) GUIDE PIN SHOULD TAXE

Fig.M52